CIVIL WARS IN BRITAIN, 1640-1646: MILITARY REVOLUTION ON CAMPAIGN

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MASTER OF MILITARY ART AND SCIENCE Strategy

by

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MASTER OF MILITARY ART AND SCIENCE

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ABSTRACT

CIVIL WARS IN BRITAIN, 1640-1646: MILITARY REVOLUTION ON CAMPAIGN by MAJ Bradley T. Gericke, 189 pages.

The military organization of nation states and their employment of armies are central aspects of early modern European history. The seventeenth century was particularly a period of transformation that witnessed drastic change in armies' preparation for and execution of military campaigns. To date, historians have tended to overlook military development as it occurred in the British Isles. Yet Britain offers the historian an interesting subject for the examination of first, how emerging ideas of military organization, doctrine, and strategy were transmitted from the European continent; and second, how British soldiers demonstrated their familiarity with contemporary military practice through the conduct of campaigns.

The evidence of military publications within Britain, as well as the experience of British soldiers overseas, indicates that English and Scottish soldiers grappled with the important tenets of the continental military revolution. The campaign strategies employed by British military commanders during the Second Bishops' War of 1640 and the English Civil War of 1642-1646 were undoubtedly complex and reflective of the confused political conditions of the period. Nonetheless, British soldiers attempted to fight and to win using a contemporary, thoroughly European understanding of warfare.

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CHAPTER 1

BRITAIN'S CIVIL WARS

The Historical Context

The wars in Scotland and England between 1640 and 1646 were complex affairs that defy ready categorization. They were also remarkably destructive. The Second Bishops' War of 1640 caused relatively few casualties because one side, the Scots, soundly defeated the English in a rare and extraordinary example of a decisive battle. The English Civil War of 1642 -1646 that pitted Parliamentarians (and Scots for awhile) against the royalist supporters of King Charles I was far bloodier. At any given moment during the summers of 1643, 1644, and 1645, between 120,000 and 140,000 adult males (roughly one in eight) were under arms in England. The total throughout Britain as a whole was probably in the vicinity of 200,000. In all, perhaps one in four or five Englishmen (about 300,000) bore arms at sometime between 1642 and 1648, and approximately 190,000 died either in combat or from disease. In other words, about 3.7 percent of England's population of around five million perished, a higher proportion than in either of the twentieth century's two world wars. In Scotland the dead numbered roughly 60,000 (six percent of the population), and in Ireland as many as 618,000 (fortyone percent). These losses point to war on a tremendous scale. Yet to date, historians have overlooked military development in the British Isles before 1640.

The military organization of states and their employment of armies is a central aspect of early modern European history. The seventeenth century was particularly a period of transformation that witnessed drastic change in governments' preparation for and execution of armed aggression, processes which in turn transformed the nature of

political institutions and society itself. Britain offers the historian a particularly interesting subject for the examination of first, how emerging ideas of military organization, doctrine, and strategy were transmitted from the European continent; and second, how Scottish and English soldiers demonstrated their familiarity with contemporary military practice through the conduct of campaigns.

Residents of England and Scotland--that is Britain, after James I and VI assumed the united crown in 1603--had not seen substantial battle on their home soil since 1547.² But between the years 1640 and 1646, England and Scotland engaged in a war between themselves, and then a civil war that witnessed divisions between Englishmen and Scotsmen played out in significant campaigns and battles. The events that constituted the Bishops' Wars and English Civil War demonstrated that England's and Scotland's military practices and institutions were by 1640 fully adapted to continental models and practices.

War in Britain during these two contests closely approximated what was happening in Europe. The armies fighting in the Thirty Years War and those engaged in England and Scotland each emphasized movement (although hindered by poor logistical systems and inefficient command and control), sought decisive battle but rarely achieved it, and when battle proved elusive, resorted to the capture and control of terrain objectives. The reason that the experience of warfare in Britain and on the continent was so similar was because the tenets of the "military revolution" underway in Europe were transmitted to Britain through the publication of theoretical knowledge of a science of war and through direct experience of Scottish and English soldiers who served overseas. For the fifty years before 1640, military institutions in Britain were slowly evolving in

concert with their European counterparts. And when war broke out in 1640, English and Scottish soldiers prosecuted their campaigns in close accordance with their knowledge and experience of the military revolution.

The Interpretive Context

Modern historiography has overlooked military development in Britain because it has been overwhelmingly focused on continental affairs. The question of how Scotland and England fit into a broader course of European military development is a matter that demands investigation not merely for its historical interest. But importantly for contemporary soldiers and statesmen, the case of Britain typifies the situation that many nation states occupy relative to the United States. Much of the present defense literature speaks in terms of a lack of a "peer competitor" with America for the foreseeable future owing to the perceived advantages possessed by the United States in a variety of socioeconomic and military categories. Yet if Scots and Englishmen could, rather unnoticed and perhaps even unintentionally sometimes, craft a military establishment reflecting the latest doctrines and organizational principles by means of concentrated study and observation, in a period of severely constrained resources and in a relatively short period, then other states perhaps can achieve the same accomplishment. Britain's case is worthy of scholars' attention.

Historian Edward Furgol's assessment of the state of Scottish military preparedness during the 1630s fairly represents the majority view of scholars regarding the general state of affairs in Britain: "Scotland was a country singularly unsuited for military defiance of the king of Great Britain and Ireland, who possessed a fleet capable

of blockading its ports, friends within who could tie down large numbers of covenanting soldiers and the potential to invade with armies from England and Ireland."³

This is a grim assessment, but typical of historians' conclusions. What has been consistently overlooked is the fact that the challenges involved in the deployment of field armies were daunting for Scotland and England alike, yet these realms produced tens of thousands of soldiers capable of remaining in the field for years of fighting and campaigning. Each side faced the task of raising, training, and equipping armies at a time when weapons were becoming increasingly sophisticated and costly, and military innovations made up-to-date training the sine qua non of success. As the extraordinarily high numbers of men who served and died in these armies indicate, it was done. To understand the framework in which military leaders were operating and the challenges that they overcame, the matter of general military change during the early modern period must be considered.

Since the mid-1950s, the "Military Revolution" has been thoroughly integrated into the canon of early modern European history. As first described in Michael Roberts' brilliant and seminal 1956 article on the subject, a military revolution occurred in sixteenth century Europe that sprung from the tactical reforms undertaken by Count Maurice of Nassau and Gustavus Adolphus. These included most notably a return to linear formations for short-armed infantry and aggressive charges for cavalry. Roberts' theory was useful in offering a conceptual framework within which early modern warfare could be discussed. It provided an alternative to a narrative account, and one that at once addressed the central questions of change and the causes and consequences of change. The notion was also fundamental in that it addressed narrow military questions,

particularly about tactics and training, in a fashion that apparently directly clarified their wider implications for government and political development.

Tactical changes pioneered in the Dutch army were crucial to Roberts' thesis. At the heart of the argument lays the significance of the reforms of Maurice of Nassau that brought forth a redefinition of the principles of manual drill and the manner in which armies were organized, trained, and deployed. All armies were organized either as militia forces or as professional forces under the command of a territorial ruler. Maurice called for armies to be organized with relatively small tactical formations into which pikemen and halbardiers, musketeers, and horsemen were eventually integrated.

In the Dutch model, the distribution of these tactical formations on the battlefield followed regular geometrical patterns that were to be retained in battle action as long as possible. The intent was to create a combined arms effect in which weapons could complement each other: pikes protect musketeers, cavalrymen deliver shock, and musketeers provide lethal firepower. This type of highly specific role playing demanded specific training and discipline.

Individual infantrymen were subjected to regularized drill through which they were taught to enact prescribed bodily movements with their arms whenever fixed words of command were issued. They had to handle their weapons according to detailed prescriptions and fixed sequences of actions, with precision and speed, and in strict coordination with other soldiers in the same tactical formation. Pikemen and infantrymen were likewise trained to coordinate their movements with the other members of the tactical formation. Finally, soldiers were trained to execute commands literally, without reflecting upon or attempting to understand their purpose. There was no room for

personal interpretation or initiative. The success or failure of the formation depended upon each of its members acting as a concerted whole.

In the long run, enforcing such patterns of well-ordered and self-constrained behavior required first, the willingness (and sometimes coercion) of the members of the formation to follow their leaders' control and second, the readiness of the resident population of nonmilitary professionals to undergo regular military training during peacetime and to do so under direct supervision as well. The Maurician reforms thus transformed armed forces into regularized, disciplined organizations that required choreographies for battle action. Consequently, warfare was turned into a less chaotic and less individualized activity.

Gustavus Adolphus followed the Maurician reforms by having his troops fight in formations that emphasized linear firepower, but he also stressed the importance of attack. Adolphus took the Dutch system one step further by creating the "Swedish Brigade," which was composed of three or four supporting regiments. Each brigade consisted of roughly two thousand men divided into companies that were arrayed into only six ranks, thus increasing the weight of shot that the musketeers could fire at once. He also used the countermarch (the maneuver by which musketeers rotated their position by moving through the ranks of their colleagues, so that, having fired, they could retire to reload while others fired) offensively, the other ranks moving forward through stationary reloaders. By aligning his battalions in depth he made them easier to control, provided greater flexibility, and made them difficult for an opponent to attack. To enhance his units' firepower even further, Adolphus often adopted the technique of placing several light field guns between his units.

Likewise, Swedish cavalry began to dispense with the 'caracole' in which charging horsemen would fire their pistols and then wheel away to the rear. The Swedes instead pressed their attack and used their swords to maximize shock effect and break enemy ranks. In short, the Swedish model, like the Dutch, was one which possessed vast tactical offensive potential.

The new armies that followed Maurice and Gustavus turned infantry firepower into a maneuverable winning formula, and thus enhanced the value of larger armies over fortifications. However, these were substantial forces that required more elaborate administrative support in the supply of money, men, and provisions. New governmental institutions were needed to support the larger financial demands. Likewise the tactical changes built on trained and disciplined soldiers led to the general adoption of comprehensive drill and uniforms, while smaller, specialized units meant that institutional standardization must be implemented. Armies hence grew rapidly to unprecedented size and complexity as a result of a revolution in tactics. In turn, the conduct of operations and the formulation of strategy subsequently underwent change.

In effect then, Roberts described a military chain of events that ultimately transformed society. His overarching claim was no less than the assertion that the centrally organized, bureaucratically governed nation-state--the paramount symbol of the modern era--grew from the tiny seed of late-sixteenth-century tactical reforms. Military factors played a key, even a preeminent, role in shaping the modern world.⁶ Thus Roberts not only described a military revolution, he offered a revolutionary interpretation of European history as well.

Prior to Roberts, most historians echoed Sir Charles Oman's comment in 1937 that: "The sixteenth century constitutes a most uninteresting period in European military history." Since Roberts, the relevance of military history to the development of European states has been acknowledged. Now the debate turns on exactly what and where and when the decisive military changes in Europe that vaulted it to world preeminence occurred.⁸

While Roberts' analysis focused on the Dutch and Swedish tactical innovations during the Thirty Years War, Geoffrey Parker expanded the military revolution theme both geographically and chronologically to embrace what some have termed the "Hapsburg Hegemony." Although Parker pointed out that the roots of the military revolution extended back as far as the 1430s, he concentrated on the period 1530 to 1710. Parker accepted the key importance of the growth of armies over this period, but argued that since the first surge in military manpower came before the reforms of Maurice of Nassau, the tactical developments described by Roberts could not be the cause of the huge armies that marched across the fields of early modern Europe.

To provide an alternative explanation for this phenomenon, Parker turned to artillery and fortress innovation in Italy in the first decades of the sixteenth century, the *trace italienne*. He emphasized the development in the late fifteenth century of mobile cannon trains that had brought about marked change in siege warfare. Castle and town walls designed to resist bombardment by medieval siege engines quickly succumbed to gunfire, and the masonry walls which had been the standard form of fortification throughout the Middle Ages no longer offered protection against even a modest siege train. Improvements in gun founding and the manufacture of gunpowder during the

sixteenth century increased the effectiveness of cannon as instruments of destruction.

Completely new forms of defense had to be devised to counter the threat of cannon-fired projectiles. The result was the erection of fortifications of much greater thickness than anything built previously in Europe.

The new works consisted of earthworks faced with brick or stone and designed to achieve a low profile to offer both the smallest possible target and the greatest possible resistance to an attacker's guns. ¹⁰ The superb ability of this type of fortress to resist both bombardment and infantry assault tipped the strategic balance in favor of the defense. Battles became irrelevant and therefore unusual; war became primarily an affair of sieges. Siege warfare, with its vast entrenchments and numerous garrisons, demanded money and manpower on an unprecedented scale, at the same time as the growth of the population and wealth of Europe made it possible to meet the demand. By emphasizing the *trace italienne*, Parker added a key new ingredient to the Military Revolution debate: military technology as a causative factor.

Historians like Roberts and Parker found the military revolution almost exclusively on the continent. Scotland and England were usually mentioned only in passing. As Stephen Porter has declared, "The British isles were on the periphery of these developments." One reason why historians have largely ignored Britain is the central position the construction of fortifications retains in the military revolution thesis. There is little doubt that such "modern" works failed to appear in Britain. Hence historians like Christopher Duffy quickly concluded that "in Scotland, the 'official' fortresses did not differ in kind from the minor castles," and were hence, indicative of low military understanding and preparedness. 12

Parker himself likewise confidently dismissed any potential of military revolution in Britain because, "In England, only a few places possessed modern fortifications in 1642, on the eve of the Civil Wars." The fortifications of Britain were indeed in poor condition. For example, in 1608 the Border castle of Annan was transformed into a kirk. While the privy council had taken measures to ensure the defensibility of Edinburgh and Dumbarton castles after 1603, their royal garrisons initially put them out of Covenanter control. Of the burghs, which were ideological bastions of the movement, not one was defended by bastioned artillery defenses. In 1627 Anstruther had actually been fortified against naval attack, but it was of little significance. The fortification of Montrose, Lieth, Burntisland, Inchgarvie, and Aberdeen had been proposed; but it is uncertain whether the works had been constructed and if so whether they had been maintained after the invasion scare. The consensus among scholars' claims that Britain was a realm deficient in the materials of war and without any citadels or burghs capable of withstanding an early modern army.

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The Issue

A major shortcoming in this interpretation is to assume that a lack of fortifications placed Great Britain outside of European military development. Rather, a proper reading of the evidence indicates that both British soldiers were in fact fully cognizant of early modern military affairs. Historians have simply overemphasized the primacy of fortifications in the military revolution thesis. The experience of Britain becomes much more correspondent to continental military developments once a refined model of military revolution, one which recognizes and assigns first place to the possession of

military tactical and organizational theory over the actual realization of fortifications, is adopted.

Events during Elizabethan and early Stuart Britain necessitated no long and formal sieges--hence the construction of expensive, sophisticated earthworks of the bastion type never occurred. The dearth of construction was due to a lack of a corresponding threat, not to any lack of capability. When such works were required during the Civil War, soldiers could and did construct fortifications regularly. Soldiers of the British Isles were fully cognizant of the revolutionary aspects of military developments on the continent.

In the decades before the Bishops' Wars, the outpouring of military tracts and texts from British publishers provided evidence that both Englishmen and Scots would fight any future conflict according to the new styles of warfare. England and Scotland were in the mainstream of the military revolution. But while military officials knew much about contemporary military theory, and many had gained valuable experience on the continent before 1640, the prosecution of campaigns that fulfilled the potential of their doctrines remained a challenge. Military leaders would seek a war of movement and would attempt to gain a strategic effect through tactical victory in a decisive battle, but troubles appeared on several fronts.

The gathering of armies in Britain was frequently delayed and hindered by problems of finance and supply. A number of factors, particularly the persistence of overall price inflation, had led to an increase in the cost associated with waging war in the 1630s. Military supplies of all sorts cost more than ever before. In addition, the very manner in which armies conducted campaigns was changing. Larger armies meant more

firearms, which were costly to produce and had to be purchased. And as the size of armies increased, campaigning became protracted, hence causing wars to last longer and expenses to rise even more. To meet their financial needs, authorities on all sides were forced to exploit traditional means of revenue raising while simultaneously devising new schemes to gather funds from sometimes reluctant subjects. ¹⁵ Of course, areas of concentrations of supply and wealth were to be found in the cities and their armories. Hence urban areas became strategic centers of gravity for British military commanders.

For instance, Newcastle, England's key coaling port in the northeast, became Scottish General Leslie's objective in 1640. London, the capital, became Charles' goal after his tenuous battlefield victory at Edgehill in 1642. Yet in neither case did the city centers themselves become battlefields. Rather, open-field engagements between armies were fought outside of the urban areas. Sometimes the victor possessed sufficient strength to move forward and occupy the town, and sometimes not. London remained in the hands of the Parliamentarians throughout the Civil War, battlefield victories and defeats notwithstanding. This was a very great asset because with it went its soldiery, populace, money, port, and supplies. Besides the capital, the Parliamentarians also possessed other important ports at Bristol (for a time; it was lost and regained), Hull, and Portsmouth. Royalist towns on the other hand included their own "capital" at Oxford, as well as the cities of Chester, Worcester, and Newark. Yet urban areas in Britain did suffer great damage.

At least 150 towns and fifty villages sustained some destruction during the war. ¹⁶ Many towns had anticipated the outbreak of hostilities by renewing their magazines of arms and gunpowder and making preliminary arrangements for defense. Fortifications

were upgraded and structures that could impede defense were destroyed or removed. In July 1642, the corporation of Great Yarmouth ordered the demolition of buildings under the town walls and in the suburbs. Sir John Hotham, the parliamentarian governor of Hull, ordered that houses outside the walls should be destroyed, while royalist attackers attempted to set the town on fire. When the more formal siege of Hull occurred in September, a bombardment by the besiegers damaged a number of structures. Likewise that month, a parliamentarian force captured Portsmouth after a brief investment during which the town was subjected to a cannonade that destroyed much of the town's church and city center. Cities did witness significant destruction, but sieges and investments were only one option deployed by military commanders. It was clearly a period in which the siege persisted alongside the open battle as a method for concluding military campaigns.

In sum, English and Scottish military leaders and soldiers were quite aware of the reforms undertaken by armies on the continent. They read and studied both Maurice and Gustavus and served in the Dutch and Swedish armies. In the generation preceding the outbreak of war in 1640, the crown attempted to implement some of the continental innovations, although with limited success. But when war did break out, military officials quickly strove to implement their professional understanding of the modern nature of war.

The Background

Given the complexity and unpredictable alliances and movements of forces that characterized the Bishops' Wars and English Civil War, a brief review of the causes of these contests bears mentioning.

Charles was a monarch who most definitely lacked the "common touch." His behavior was most often defined by a deeply-seated sense of suspicion. Charles demanded that his will be followed in every respect, but experienced difficulty communicating with others, so his subjects thought him merely to be remote and overbearing. Charles regarded any mention of disagreement with his decisions as a mark of personal disloyalty and potential challenge to the crown.

Between 1629 and 1640 Charles and his close advisors ruled England and Scotland without summoning a Parliament. During this period of "Personal Rule," Charles' aloofness prompted a gradual erosion of trust between the ruler and the ruled at all levels of society. Little evidence for revolt or rebellion can be found, but as Charles insisted upon the sanctity of his will and as there existed no legitimate forum for the discussion of policy, both foreign and domestic, a groundswell of mistrust arose that needed only a spark to ignite into open dissent.

In the late 1630s, that spark arrived in two forms. First, the Scots resisted the imposition of Charles' heavy-handed changes to their church and property rights. The result was two brief Bishops' Wars in 1639 and 1640. When a Scottish army assembled and then led by General Alexander Leslie invaded northern England in August 1640, Charles was forced to call for a parliament to deal with the crisis--and to pay the Scots who were demanding compensation before they would depart English soil.¹⁷

The resulting parliamentary sessions were volatile and contentious. The second emergency for the realm occurred in October 1641 when news reached London that Irish Catholics had broken into rebellion and were allegedly slaughtering innocent Protestants. Charles called for the raising of an army under his command to crush the rebellion. But

Parliament balked. The prospect of Charles with an army at his disposal was simply too much for many in Parliament to tolerate. Charles' powerful convictions of sovereignty now openly clashed with a decade's worth of parliamentary mistrust. Parliament passed a militia ordinance to begin the process of raising military forces. Denied leadership of the army by Parliament, Charles raised his standard at Nottingham. Civil war had come again to the three kingdoms of England, Scotland, and Ireland. Military leaders were put to work implementing their understanding of the military revolution.

¹David L Smith, A History of the Modern British Isles, 1603-1707: The Double Crown (Oxford: Blackwell Publishers, 1998), 147. Smith uses the numbers developed by Charles Carlton in Going To The Wars: The Experience Of The British Civil Wars, 1638-1651 (London: Routledge, 1992), passim. These figures are probably as accurate as historians will ever be able to determine.

²The English victory at Pinkie occurred in 1547. Also, this essay will not cover in any detail the events in Ireland during the seventeenth century. Nor will the Second Civil War be addressed. Sufficient evidence and the brevity of the essay determines that 1640-46 is most appropriate.

³Edward M. Furgol, "Scotland Turned Sweden: The Scottish Covenanters and the Military Revolution, 1638-1651, " in *The Scottish National Covenant In Its British Context*, ed. John Morrill (Edinburgh: Edinburgh University Press, 1990), 134.

⁴Peter Young. *Hastings to Culloden: Battlefields of Britain* (Kineton, England: The Roundwood Press, 1979). Unfortunately, Young's analysis goes little deeper than this recognition of shared conditions.

⁵For a complete assessment of the military revolution historiography and its current debates, see Clifford J. Rogers, ed., *The Military Revolution Debate: Readings On The Military Transformation Of Early Modern Europe*. (Boulder: Westview Press, 1995.)

⁶Other authors have engaged various aspects of the military revolution thesis. In the 1980s David Parrott argued that the tactical reforms described by Roberts were in practice nearly irrelevant to the battles after the Swedish invasion of Germany. Rather than emphasizing tactical or technological factors, Parrot turned to logistic and political influences when addressing the subject of army growth.

John Lynn contributed a study of French tactical developments, between 1560 and 1660, to argue that the French evolved the small tactical units and linear infantry

formations typical of the Military Revolution independently of Dutch and Swedish developments. Critical of the importance of the *trace italienne*, Lynn stresses the growing population and wealth of Europe as the key factors behind the development of the massive armed forces of the sixteenth and seventeenth centuries.

⁷Geoffrey Parker, "The 'Military Revolution, 1560-1660'—A Myth?" quoted Rogers, 37.

⁸See Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800, 2d ed.* (Cambridge: Cambridge University Press, 1996). Parker did not refute Roberts. Rather, he more fully explained and tempered Roberts' position. To date, Parker's work remains the premier study in the field.

There are critics of the Parker and Roberts. Jeremy Black has recently offered perhaps the most sustained counter-argument. While he concurs that a Military Revolution did occur, he dates it c. 1660- c. 1720., Black argues that rather than adopting the notion of a single sixteenth century revolution it is more accurate to suggest that, if early modern changes can be described in terms of revolution, there were two "revolutions," one in the late fifteenth and early sixteenth centuries (Parker and Roberts), and the second, more decisive Military Revolution a full century later.

Black identifies both qualitative and quantative changes to support his case. He points out that the replacement of the pike by the newly developed socket bayonet, the substitution of the matchlock musket by the flintlock, and the development of the prepackaged cartridge increased infantry firepower and maneuverability. It led also to a decline in the relative importance of cavalry in most European armies. The development of the socket bayonet, of the flintlock musket, and of improved warship a design brought about qualitative changes in warfare at least as important as those of Roberts' period, and arguably more so, with their consequence of a rise in the tactical importance of massed firepower in both land and naval warfare. The corresponding quantitative changes-considerably larger armies and fleets--confirm the conclusion that the later period has been unduly neglected. See Jeremy Black, European Warfare, 1660-1815 (New Haven: Yale University Press, 1997) 3-11.

Others, such as David Eltis, have claimed that scholars should avoid the concept entirely. The danger according to Eltis "is that we will see a rash of further studies mixing oversimplifications of the military aspects of the period with even more suspicious sweeping statements of political, economic and social linkages to these dramatic and varied visions of military revolution." See David Eltis, *The Military Revolution In Sixteenth Century Europe* (London: Tauris Academic Studies, 1995), 33.

¹⁰Thus a corollary of the large-scale and prolonged sieges of the late sixteenth and early seventeenth centuries was that larger armies were required to reduce the now sophisticated defensive positions which meant that operations frequently extended well beyond the traditional campaigning season of the summer months. Furthermore, the military's demands upon the civilian population grew as the numbers of troops and

⁹Rogers, 3.

garrisons increased. The greater numbers of troops, the length of the campaigns, and the duration of sieges, also impacted the civilian population both directly and indirectly.

¹¹Stephen Porter, *Destruction In The English Civil Wars* (United Kingdom: Alan Sutton Publishing, Ltd., 1994), 4.

¹²Christopher Duffy, *Siege Warfare: The Fortress In The Early Modern World*, 1494-1660 (London: Routledge & Kegan Paul, 1979), 141.

¹³Parker, 28.

¹⁴Furgol, "Scotland Turned Sweden," 137.

¹⁵Mark Charles Fissel, "Scottish War And English Money: The Short Parliament Of 1640," in *War And Government In Britain, 1598-1650*, ed. Mark Charles Fissel (Manchester: Manchester University Press, 1991), 195. It is clear that the dynamism of the military revolution could potentially overwhelm and collapse governments as well as invigorate them.

¹⁶Porter, 65.

¹⁷The conduct of the Second Bishops' War is dealt with in detail later in this paper.

CHAPTER 2

KNOWLEDGE OF WAR IN EARLY MODERN BRITAIN

The proliferation of military literature printed in English and available to readers in England and Scotland during the early Stuart period indicates a growing interest in, plus knowledge of, military affairs. Military information of many kinds catered to and fostered consciousness of European affairs. It contributed to the war education, in its broader sense, of an extensive public that had by 1640 become accustomed to sending its sons overseas to serve in continental armies.

Since the reign of Elizabeth, significant numbers of Scottish and English troops had been levied and sent to France, Germany, Poland, and the Low Countries. The existence of a large number of Scots and Englishmen with serious, professional experience constituted a shaping and controlling factor for military literature in Britain. Indeed, some veterans were among its authors. More to the point, they ensured that it was tied to reality, that it did not lapse into the fictional and polemical, and that it was not sterile.

Wars and rumors of war were familiar aspects of daily life in Britain during the early decades of the seventeenth century. The turmoil and violence underway in central Europe after 1618 in the form of the Thirty Years War, as well as the decades-long struggle of Spain in the Low Countries meant that military affairs remained prominent features of the international scene. Britain's Protestant achievement, yet relatively novel in Europe, instinctively drew much attention to potential threats. As late as the 1630s, remembrance of the Armada still burned in living memory. Fears of popery and the imagined horrors of heretical invasion kept religious anxiety intense as the public avidly

followed the cruelties and social breakdown evident on the continent. Warfare must have seemed an endemic state of affairs.

However, underlying the reports of war as harbinger of destruction was a remarkable number of analytical works. These narratives, in works ranging from elevated statements of general principles to drill books and historical vignettes, emphasized professional instruction. Increasingly, knowledge of military events on the continent came to Britain through a literature of war that sought to elucidate its modern character.³ Authors examined the conduct of campaigns and presented observations as something to which mind and skill were to be applied, rather than fortune or happenstance. In other words, war was becoming increasingly the arena of thinking men. The literature reflects this fact by seeking to bring analytical insight into the elements of conflict. Illustrations such as the following described in detail the battlefield deployments of armies. This type of literature had little to do with traditional chivalric notions of combat but instead described current European campaigns and their generals and highlighted the social and moral dangers that attended war. The literature provided a broad and utilitarian education for the an embryonic order of military professionals, while at the same time informing the broader public of war's emerging relevance to the functioning of their state and society. The clash of armies was no longer being considered a local affair. The time was passing in Europe when political elites could contemplate war in isolation from the demands and resources of the nascent nation.

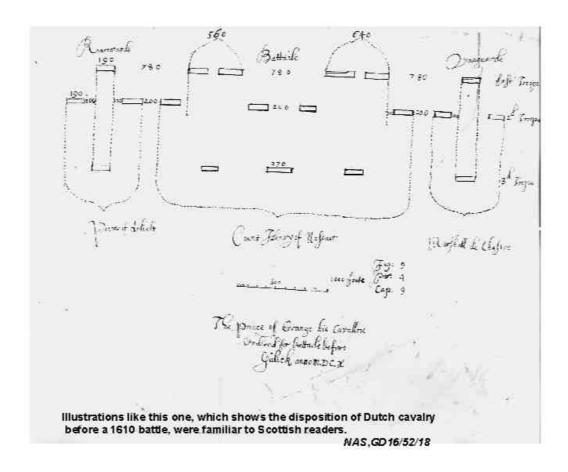


Figure 1. Example of a Dutch formation prior to battle. Source: NAS, GD16/52/18

Underlying the heightened demand for printed materials among the populace was a rising level of literacy. Many families possessed libraries of some kind by 1640. If Kent was at all typical, at least two-thirds of the urban gentry and professional men were book owners, and some of those books came from Edinburgh presses.⁴ Many others were printed in London.

One conservative means of measuring literacy is to determine the ability of individuals to sign their names to documents.⁵ Signatures to the National Covenant of 1638 and the Solemn League and Covenant of 1643 have survived for a range of

parishes. They suggest that adult male literacy in the mid-seventeenth century was about sixty-eight percent in Edinburgh and ranged between fifty-four percent and forty-seven percent for smaller urban centers in both Scotland and England. In rural areas literacy was much lower, about 20 percent. Overall, approximately twenty-five percent of the population were able to sign their names as were thirty percent in England. The Scottish education system produced levels of literacy at about the same rate as Northern England. Importantly, Scotland and England together were on par with the educational attainment of Holland and Sweden.⁶ The differences in levels of literacy in between town and country suggest that economic rather than cultural forces provided the main spur for people to read and write. Perhaps about one and one-half to two percent of boys in the appropriate age groups were able to attend a university. The figure for England may have been between one to one and one-half percent. Again, these figures were slightly better in this respect than France or Germany but were roughly equal to the experience of Sweden and the United Provinces. In short, the ability to read was spreading throughout Britain. The level of literacy generally kept pace with states on the continent. The market for printed literature was real.

A royally licensed printing press had been operative in Edinburgh as early as 1507. Edinburgh University was the beneficiary of numerous collections and numerous studies of history, arithmetics, and politics. In 1637 the library contained 2,410 volumes and by 1641 more than 3,050. The holdings were quite diverse and included:

Thucydides in English, The History of Queen Elizabeth, History of England, Crook's Anatomie, Francogallia, A Review of the Councell of Trent, Ptolemei's Geographia, Usher's Answer, Cambdeni Britannica, Virulam, his Naturall historie, Decimall

Arithmetica, The Names of Herbs, by William Turner, The Creation of Barones, Wilson's Dictionary, Mineralogia, Hunters Treatise of Scots Weights and Measures, Battle of Agincourt, Archers du Corps, Archers de la manche¹¹

There was also a considerable output of newsbooks, pamphlets, and broadsheets that must have done much to disseminate information n the methods of contemporary warfare.

Military authors were self-conscious promoters of a modern system of investigation. Like the later theoreticians who would more fully draw on Enlightenment methods of inquiry, seventeenth century thinkers also believed that war was amenable to reason and demanded the application of human intellect. The scientific literature of war was designed to bring military success by disseminating reasoned knowledge, and in so doing to reduce the effects of human incompetence and unforeseeable accident.

In the decades before the English Civil War the studies of European military leaders began to bear fruit in the form of new tactical methods that successfully combined classical theory with the new technologies of the day. They began to make their principles explicitly in formal drill books. These manuals spelled out in pictorial and written form rules for the movements mainly of infantrymen and for the handling of their weapons. They were largely devoted to the handling of pikes and portable firearms.

These descriptions attained a uniform structure in most European armies, with words of command presented as a headline, subsequent written descriptions of the commanded movements and stances and, in many cases, pictures. More frequently in the seventeenth, the pictures supplied additional information about details of the movements and postures

to be assumed. The manuals were usually printed and devised of the use of captains who were to employ them to drill their battalions.

The Maurician reformers also insisted that manual drill should prepare infantrymen in peacetime for eventual battle action. To that end they composed elaborate choreographies of precisely defined movements and postures with and without arms. Throughout the seventeenth century, four basic sequences were emphasized: first, the movements which individual soldiers had to carry out without arms; second, movements for the handling of portable forearm, mainly in loading and firing; third, movements for the handling of pikes, specifically while charging; and, fourth, movements to be carried out by the entire battalion. It was expected that the infantrymen would enact these choreographies as frequently as possible in battle in exactly the same way as they had practiced them during drills. Hence seventeenth-and eighteenth century manual drill was innately practical in the sense that the sequences of drill were held to be repeatable in battle.

Such beliefs rested on the assumption that soldiers could be minutely trained to execute their tasks and commands. They had to constrain their moments, to refrain from "reasoning" about given commands, and to confine themselves to the actions that had been commanded. The drill manuals depicted soldiers as well-ordered infantrymen who constrained their actions.

Thus, by the beginning of the seventeenth century, manual drill was represented as a well-ordered pattern of constrained behavior in which the infantrymen were drilled to handle their arms, to enact commanded movements with precision by themselves and as part of a unit.

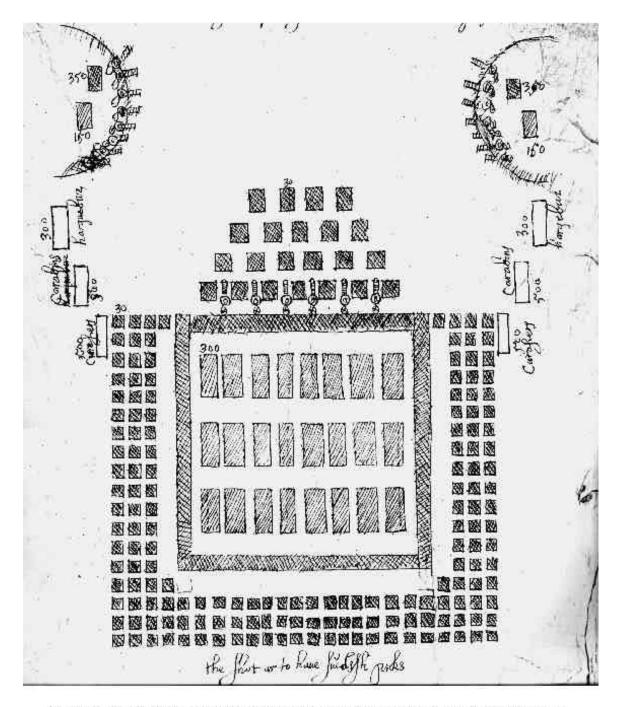
One typical treatise, "The Swedish way of composing a regiment in a brigade," illustrates the level of detail expected in military affairs:

Every regiment of foot consists of 1008 men divided in aught [8] companie[s], every company of 126 men, the brigade mead upe of a regiment and half regiment consisting of 1800 men....Between every brigade there was sufficient distance left for the brigades of the reserve to come between if need required, some say 50 paces; there must be 5 or 600 paces between the van or reserve....the picks and musketeers must be in even line or front for that was the way the king [?] in his last battles.¹²

Other passages specify the duties of a variety of soldiers in the formation. The captain, lieutenant, ensigns, sergeants, muster schriver, furrier, color-bearer, and drummers are each mentioned. There is even mention of drill for the purpose of ceremony:

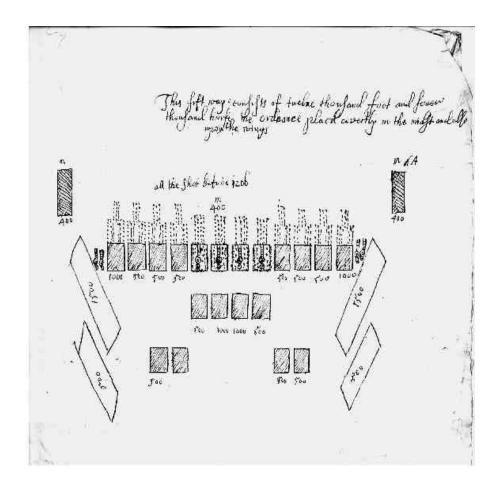
This that follows is more for shoe then substance, the Colonel of the briggad ordaines the battlel of pikes being the middle squadron of pikes to advance in one body before the rest till they are free of the musketeers and pikes which makes the wings of the briggad and the battle of pikes standing firm, the thirty two rows of musketeers which were drawn up behind them marching up till they fill up the void between the squadrons of pikes standing right behind their own pikes.¹³

As the following illustrations demonstrate, these patterns evolved into the system of linear tactics of the eighteenth century in which commanders were expected to execute minutely the general rules of war in detail and into which the common soldiers were to be integrated as if they were parts of a neatly composed puzzle.



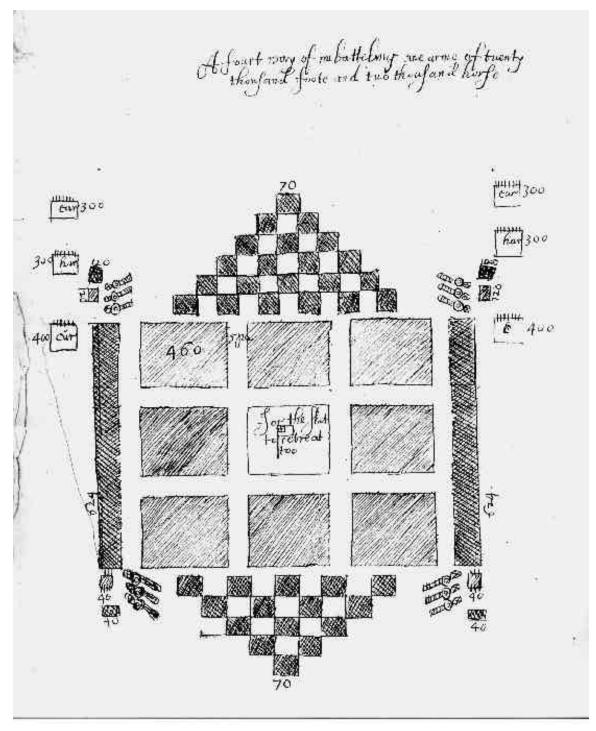
An example of a type of formation being debated by 17c. military practioners NAS, GD16/52/18

Figure 2. Example of a seventeenth century formation. Source NAS, GD16/52/18



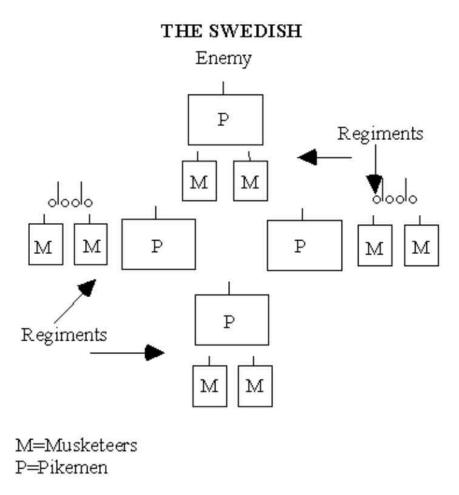
An example of a type of formation being debated by 17c. military practioners NAS, GD16/52/18

Figure 3. Example of a seventeenth century formation. Source: NAS, GD16/52/18



A final example of a type of formation being debated by 17c. military practioners NAS, GD16/52/18

Figure 4. Example of a seventeenth century formation. Source: NAS, GD16/52/18



The standard Swedish Brigade Formation

Figure 5. Sketch of the standard Swedish brigade formation. Source: Author.

The outpouring of military tracts and texts from publishers in Britain provided evidence that both Englishmen and Scots would fight any future conflict according to these new styles of warfare. England and Scotland were in the mainstream of the military revolution. Tracts with titles like "The Inglish way of composing ther regments and

Tertias" were common. ¹⁴ Others explicitly required that if "thair be any in the shire who have been abroad" shall be divided equally to assist with "drilling and exercising." ¹⁵ The nature of the ensuing conflicts within and between Scotland and England would reflect continental tenets of military revolution.

Some works in circulation covered the general conduct of warfare, while others specialized in such topics as fortification, artillery, pyrotechnics, or drill. Thomas Smith's *The Arte Of Gunnierie*, which saw several editions before 1610, offered not only theory to its readers, but also concentrated heavily upon the "secret and practical conclusions" necessary to "all such as are professors" of artillery. Tangential technical interests in military technologies were also evident. For example, discussion of 'artificial fireworks' in a number of books such as Thomas Malthus' *A Treatise of Artificial Fire-Workes* (1629), served to describe many military applications, as did John Babington's *Pyrotechnia* (1635).

There was a smaller literature on notable military actions, the experiences of individuals, and news of current affairs. Such works provided the reader with an impression of the conduct, rather than the theory, of warfare. In 1637 Henry Hexham's *A True And Briefe Relation Of The Famous Siege Of Breda* discussed not only the military conflict, but provided statistics concerning the numbers killed and wounded in the fifty-five companies of the 'English *tercia*.' Among the memoirs of Englishmen who had served abroad were Sir Roger Williams' narrative of the years he had spent campaigning in the Low Countries, which was published in 1618. Robert Monro's account of his experiences with the Scots regiment in the Swedish service in Germany was issued in 1637. At a time when the tensions between Scotland and England were on the rise,

Monro's dramatic account must have helped to give readers a vivid picture of operations in the German wars.

The reader was, therefore, well provided with material relating to military affairs. There was an increasing interest in the subject during the late 1630s, and the market for military books was clearly a growing one. In the first thirty-five ears of the century, sixty such books were published in English, but between 1635 and 1642 a further thirty-three appeared. The Civil War period saw the re-issue of several earlier works, specifically aimed at the officer corps on both sides. Henry Hexham's *The Principles of the Art Militarie Practised in the Warres of the United Netherlands* and his *An Appendix of the Quarter for the ransoming of Officers of all Qualities, and Souldiers, concluded between the King of Spayne his side, and the side of the States Genral of the United Netherlands* were both published initially in 1637. Another popular work which appeared before the Bishops' Wars was William Bariffe's *Military Discipline*, printed in 1635.

But perhaps the work which most indicated a far-reaching and sophisticated grasp of military affairs to be published in English before the Civil Wars was Robert Ward's *Animadversions Of Warre, Or, A Militarie Magazine Of The Truest Rules, And Ablest Instructions For The Managing Of Warre*, published in 1639. Ward's work is most impressive in its wide-ranging treatment of military practice. In two books totaling more than four hundred pages, Ward traveled beyond the standard discussions of 'fortification and stratagems" to cover such diverse subjects as "How to provide in peace for warre" to "The Office and dutie of every particular Officer in an Armie" to "A Description of Engines, and warlike Instruments." In this single, exhaustive treatment there thus appears

convincing evidence that the continental military revolution was available to readers in England and Scotland.

Beyond printed matter, Scots and Englishmen acquired military knowledge from direct experience as well. Service in foreign armies was a long-standing practice in both England and Scotland. The overall story of overseas military adventures during the half-century preceding 1640 was one of mixed results. Under Elizabeth, soldiers from England were certainly active. During the sixteenth century the common threat that Scottish and English Protestants saw in the likely wake of a Spanish victory in the Netherlands had persuaded both governments to cooperate in sending men to fight overseas.

Queen Elizabeth inherited the remnants of a medieval army that was no longer effective at either home or abroad, and a militia system that statutorily prevented overseas service entirely. England needed a new army, and the monarch set out to create one. All able-bodied men between the ages of sixteen and sixty, recruited by county, were liable for service with a newly constituted militia. The Queen and Privy Council determined each county's quota. It was impossible to keep the entire male population armed and trained, and the development of the "trained bands" was a recognition that there must be specialization for war. The total number eligible for military service under Elizabeth was probably between 200,000 and 250,000 men. The number in the field at any one time, however, was probably about a tenth of that figure. In 1575, out of a total of 183,000 able men recorded in the national musters in thirty-seven counties, there were twelve thousand selected for training and 63,000 equipped but untrained. The balance was made up of pioneers, able men who were neither trained nor provided with weapons, and about three

thousand cavalry. Both trained and untrained men were sent overseas. And important category of overseas soldier, especially in terms of the transmission of military knowledge, was the gentlemen volunteer. These men enlisted in the hope of gaining recognition and eventually gaining promotion. Their numbers varied, but in the Low Countries in 1585, an allowance of four positions in a company of 150 men was made for such volunteers.¹⁸

Overall, of the 106,000 Englishmen levied for overseas military service between 1585 and 1602, at least 29,000 (twenty-eight percent) went to Ireland while a further 27,000 (twenty-five percent) were sent in part to Ireland, and in part elsewhere. The second largest contingent, 20,500 (nineteen percent), went to the Netherlands. From 1595 to 1601 there were never fewer than 2,000 Irish-destined levies each year, and from 1596 to 1600 there were at least 5,000 annually. In 1601, the 12,620 troops levied for Ireland was the single largest annual levy in England's history to that time, and one-third larger than at any other time in Elizabeth's reign. 19

Elizabethan overseas expeditions provided essential help to England's allies and provided English soldiers with key experience, but the expeditions themselves were poorly administered. The lack of an effective commissariat and unreliable pay system led to widespread wasteage, corruption, and the loss of lives due to disease and malnutrition.²⁰ Nonetheless, England benefited from the attainment of military experience that was important in the militia reforms enacted under James and Charles.

Within Scotland, the Privy Council authorized a number of expeditions for pacifying parts of the kingdom after 1603. The Western Isles witnessed expeditions in 1605-1608, 1612-1616, 1622, and 1626. There had been official incursions into the

western Highlands in 1613-1614, 1615-1616, 1618, 1621-1622, and 1625. Expeditions had also been mounted against the Northern Isles (1614-1615), the clan Macgregor (1611-1613), the central Highlands (1624), and the northeastern Highlands (1634).²¹

Charles I also sent armies to France and Germany. General poverty within the borders of Scotland, combined with the political ambitions of James and Charles, had increased the number of Scots who sought an opportunity to serve in cross-channel military adventures after 1620. From 1620 to 1637 the Stuart kings had permitted a large exportation of surplus Scottish manpower to serve in the armies of France, Sweden, the Netherlands, Denmark and Russia. In the years 1624, 1626-1629, 1631-1633, and 1637 royal warrants had permitted the levying of 41,400 Scots for continental armies. ²² It would have been remarkable (and unlikely) if all of these troops had been raised; nevertheless thousands did depart from Scotland and had gained military training and experience by 1638-1639. ²³ These men served as a catalyst for the militarization of the broader Scottish society during the Civil War period.

The estimate that as many as twenty thousand Britons served abroad in the years between the accession of Charles I and the outbreak of the Civil War may be on the low side. There was an average of four thousand with the Spanish Army of Flanders during the 1630s and several times that number fighting in Germany.²⁴ Those who campaigned abroad can be roughly divided into two categories: the gentleman volunteers and the professional soldiers. Typically, the former served for relatively short periods, perhaps during a longer spell of traveling on the continent, while the latter may have campaigned abroad for many years, gaining wide experience of warfare. Scots soldiers mainly served in the Danish and Swedish armies during the seventeenth century, although a number

served for the king of France as well.²⁵ The most well-known Scot was Alexander Leslie, First Earl of Leven, the leader of the Scots' army in 1640. Important Englishmen served also, to include Robert Deveraux, 3d Earl of Essex who served on the Palatinate and the Cadiz Expedition as well as Lord Fairfax who soldiered in the Low Countries.

Not surprisingly, mercenary careers were most likely to appeal to poor noblemen or to younger sons of noblemen for whom the military life offered some possibility of retaining their social status. (This became particularly acute in the seventeenth century.) By the third decade of the century there were no more church lands to distribute and royal patronage had begun to diminish. Military service at home or abroad was therefore one means by which an over-bloated and financially precarious nobility might avoid slipping into a kind of impoverished nobility.²⁶

These men who served in foreign parts did not cut their ties with their homeland. Employment opportunities fluctuated seasonally and with the policies and finances of employers. Many officers and some men came and went between England and the continent according to demand. And when they returned to Britain they brought with them a newly-found sense of professional solidarity, of shared vocation and mutual interests that extended well below the ranks of the general and his colonels. It was these lesser-privileged professionals, often sergeants and lieutenants, who came home to train the militia companies, show artillerymen how to work their guns, and the town elders the best means of constructing fortifications and procuring arms. In every significant way, they brought European military practice and experience of war to peacetime Britain.

The literature of war that was pouring off of presses in London, Edinburgh, and elsewhere was both product and vehicle of this continental military exposure. Scots and

Englishmen conditioned their fellow citizens by promoting a new rational approach to warfare while at the same time furthering knowledge about the nature of war and its consequences.

¹While the designation "Britain" to describe the physical union of the crowns of Scotland and England under James I after 1603, the label "British" to describe the people living there is premature. Distinct Scot and English identities prevailed until the end of the century at least. Upon the formal Union in 1707, a sense of nationhood rapidly developed thereafter.

²Active fighting in the Low Countries occurred between 1572 and 1607, and again between 1621 and 1647. Also underway through the 1590s were the French Wars of Religion, which did not subside until Henry IV took the French crown in 1594.

³For a lucid and comprehensive overview of military literature in England prior to 1642 see Barbara Donagan, "Halcyon Days And The Literature Off War: England's Military Education Before 1642," *Past and Present* 147 (May 1995): 65-100.

⁴Peter Clark, "The Ownership of Books in England, 1560-1640: The Example of Some Kentish Townsfolk," in *Schooling and Society: Studies in the History of Education*, ed. Lawrence Stone, 1976. 97, 101.

Sir Edward Dering's (1598-1644, nationality unknown), library reflected numerous places of publication: London 37, Edinburgh 6, Cologne 4, Oxford 3, Prague 1, Antwerp 1, France 1, Nurenburg 1, Magdeburg 1, Unk. 23

See Sir Edward Dering, *Catlogue of His Books*, ca. 1640-1642 (Washington, D.C: Folger Library) [vb 297].

⁵This method may underestimate reading ability since reading was typically taught before writing.

⁶A central function of education in every state during the seventeenth century was to produce ideological conformity. Systems of instruction at the local level emphasized rote learning. Students were encouraged to acquire the knowledge being presented rather than to develop analytical understanding. However, those students who attended the universities were of course exposed to far more cosmopolitan ideas. It must be understood as well that teaching was rapidly becoming professionalized in this period. Standards were rapidly rising and expectations likewise. Church leaders quickly found to their dismay that once students could read and write, their minds could no longer be controlled. Hence by the late 1640s, an amazingly diverse assemblage of groups petitioned for fundamental reform in England, e.g. Levellers, Ranters, Fifth Monarchists, Quakers, etc.

⁷David Cressy, *Literacy And The Social Order: Reading and Writing in Tudor and Stuart England* (Cambridge: Cambridge University Press, 1980), passim.

⁸A royal license was obtained by Walter Chepman and Andrew Myllar. See the *Register of the Privy Seal of Scotland* [Scottish Records, 13], Edinburgh, 1908, vol 1, no. 1546.

⁹In 1580, three years before the founding of Edinburgh University, Clement Little donated 276 volumes. For a discussion of the library's origins, see Charles P. Finlayson, *Clement Little and His Library: The Origins of Edinburgh University Library* (Edinburgh: Edinburgh University, 1980).

¹⁰Jean R. Guild and Lexander Law, eds., *Edinburgh University Library: A Collection of Historical Essays* (Edinburgh: Edinburgh University Library, 1982), 49.
 ¹¹See Edinburgh University Library, Accessions-Donations [Da.1.29]: f.5 (1639); f.11 (1638, 1639, 1640); f.13 (1640); f.24 (1643); Also, *Edinburgh University Library Catalogues Librorum in Repositories in Bibliotheca Edinensis*, [Da.1.27], f. 146, f.168, f.113; and *Papers of Military Interest, sixteenth century-eighteenth century* [Lang I], 315-340.

¹²National Archives of Scotland (hereafter NAS), GD16/52/14, f8

¹³Ibid., nf.

¹⁴Ibid., nf.

¹⁵NAS GD16/52/19.

¹⁶Stephen Porter, *Destruction In The English Civil Wars* (United Kingdom: Alan Sutton Publishing, Ltd., 1994), 9.

¹⁷Two historians who have documented sixteenth century Scottish mercenaries are Elizabeth Bonner and Paul Dukes. In *The Scottish Soldier Abroad* see Elizabeth Bonner's "Continuing The Auld Alliance in the Sixteenth Century: Scots in France and French in Scotland," 31-46. And Paul Dukes, "The First Scottish Soldiers In Russia", 47-54.

¹⁸C. G. Cruickshank, *Elizabeth's Army* (Oxford: Oxford University Press, 2d ed., 1966), 24, 25.

¹⁹Ibid., 266.

²⁰James Scott Wheeler, *The Making Of A World Power: War And The Military Revolution In Seventeenth Century England* (Gloucestershire: Sutton Publishing, 2000), 68.

²¹Furgol, 3. Dr. Furgol makes the point that these campaigns "were of little use in providing Scotland with large military reserves, because the numbers involved consisted of hundreds of men not thousands." He further adds that since the campaigns were not annual events they would not have allowed many different men to receive military experience, particularly since their occurrence was sporadic with none occurring in 1610, 1617, 1619-20, 1626-33 and 1635-38. Yet Furgol is too quick to dismiss their value. He does not fairly consider the cumulative effect of participation in such military deployments upon the dissemination and reputation of military knowledge.

²³Of course, English soldiers participated in these events as well and would have gained similar military experience.

²²Furgol, 2.

²⁴Porter, 5.

²⁵Parker, *Military Revolution*, 51-53, 175-176.

²⁶See Keith Roberts, "Lessons In Revolution: The Impact of the London Military Companies," *Cromwelliana*,1992, 36-39.

CHAPTER 3

THE MILITARY ESTABLISHMENT

Military officials in the two kingdoms knew much about contemporary military theory, and many had gained valuable experience on the continent before 1640. But to fully field armies that could employ the new formations so familiar to the continent required extensive economic and administrative institutions. Fortunately, both Scotland and England entered the 1630s as a fully functioning European state. Within the Stuart kingdoms, merchants and traders had ensured that their lands were full participants in the broad commercial trends underway throughout Europe. Taking advantage of an increasingly sophisticated trading network, Scots and Englishmen exchanged goods with many neighbors and formed a competitive, sought-after market. When religious tensions heightened to the point of war in 1640, they could boast of foreign trade networks, urban organization, and familiarity with Europe. Martial preparations were decisively enhanced because of the sound economic and demographic footing already in place. Britain hardly constituted an isolated backwater. Rather the armies fielded after 1640 were remarkably similar to their continental counterparts.

Britain's population growth during the sixteenth and seventeenth centuries, which accompanied the emergence of larger towns and increasing prosperity for at least some of the inhabitants, served as a catalyst for the broader changing character and pattern of economic life. Greater order in the countryside owing to more effective local government, and relative peace between Scotland and England over the century preceding 1640, allowed Britons to participate in a growing market economy that placed the nation firmly within the orbit of European development. The reigns of James and

Charles witnessed a quiet but steady integration of mercantile exchanges with those of European states further afield. There is no question that the realm of the Stuart monarchs was not a wealthy place. But it was nonetheless a place occupied by people aware of, and participating in, an increasingly interconnected community of farmers, merchants, and manufacturers. In many ways, the political union of kingdoms that James eagerly sought was already underway at the unintended behest of his subjects. Scotland particularly in the late 1630s was not the primitive place is has frequently been assumed. A review of agriculture, trade, urban setting, and population will reveal the advent of a burgeoning economy that lay firmly within the framework of contemporary European development and established the conditions necessary for the creation of competent armed forces when crisis arrived in 1640.

By the mid 1620s, Scotland was moving towards self-sufficiency (however tenuous) in foodstuffs, whereas England was essentially already so.² Agricultural practices exhibited a fundamental productive consistency by this period despite some differences in organization and output. Furthermore, both England and Scotland were participating in a commodities trade that was growing in overall volume and worth.³

The precise value of overseas trade is difficult to pinpoint. Comparing prices of goods over a largely inflationary period yields only a general indication of both rising incomes and expenses. The price of staples indicates this trend. In 1628, a fifteen-ounce loaf of bread was selling for twelve pence, and a pint of beer could be purchased for ten pence By 1630, twelve pence would purchase only a ten ounce loaf of bread. In 1634 that same pint of beer cost twenty pence, although plentiful harvests in the early 1630s had dropped the cost of a thirteen-ounce loaf of bread to twelve pence. The amount of

grain on hand in this period even moved the Edinburgh Privy Council to allow the export of 4,000 bolls of wheat in 1632.⁵ On the eve of the Bishops' Wars in 1639, prices remained at a similar level: Fourteen-ounce loaves of either wheat or sour bread cost twelve pence, and a pint of beer sold for sixteen pence⁶ The degree to which wage rates maintained pace with prices is uncertain, although it seems that laborers at least gradually lost ground. Many workers were compensated in part through food and drink thus the payment of wages, when recorded at all, may indicate only a portion of their income.⁷

Scottish officials at all levels of government practiced ad hoc economic policies.⁸ They tended to react rather than to plan ahead, most often finding themselves responding to short-term crises.⁹ Local political pressures usually dictated that economic legislation support the idea of protecting the home market and, more urgently, to trying to achieve a net inflow rather than an outflow of coin but no clearly identified mercantilist policy had yet been formulated.¹⁰

During most of the sixteenth century, Britain's trade with Europe retained the structure that had characterized its trade for centuries prior, resting on the export of the primary products of agriculture, fishing and mining, along with some low-grade manufactures like linen and woolen cloth. In return, imports consisted mostly of manufactures, and luxury items from trading partners that lay around the periphery of the North Sea.

Scandinavian and the Baltic states supplied many essential products upon which the Scots depended during the reign of the Stuarts. By the seventeenth century hardwood forests in Scotland, except in remote Highland districts, were scarce and those in England were rapidly being depleted, so a reliable source of timber was vital to the construction of

everything from handcarts to houses. One cargo in three coming into Dundee in the late sixteenth century sailed from Norway, much of it timber. The Baltic also provided iron, as well as flax, hemp, pitch, and tar. Reflective of the strengthening agricultural sector, imports to Scotland from Baltic granaries fell substantially between 1590 and 1620, while Scottish exports correspondingly increased.¹¹

Britain's trade with Sweden developed from the 1570s, and imports of iron rose steadily. Recorded shipments of iron from Sweden totaled 103 between 1590 and 1599 and 462 between 1630 and 1639. Between the same two periods, shipments of hemp and flax rose from ninety to 196. In return, the export of cloth to Sweden rose from 250 ells in 1581-1586 to 9,300 in 1607-1615. Average annual sales of salt to Stockholm rose to nearly 900 tons in the early seventeenth century while herring exports also increased rapidly.

Trade with the Low Countries put merchants in direct contact with the world's greatest commercial centers. The Dutch provided Britain with a wide range of manufactures, cloth, dyestuffs, and provisions. In return they took skins, hides, wool, and fish as well as coarse cloth, hose, and linen yarn, as well as increasing quantities of salt and coal. In some years, as many as fifty vessels laden with Scottish coal arrived at Veere alone.

Most burghs of any size depended to some extent on overseas trade, making the towns transshipment points for the exchange of goods (and ideas), to a variety of European destinations. Aberdeen shore accounts and Dundee shipping lists provide evidence of this kind of developing Scottish trade network. But beyond the general progress of the trades, and of importance to the state's capacity to wage war in 1640, was

the maturation of mineral extraction and its subsequent manufacture into the implements of war.

By the early seventeenth century lead mining had begun to make a useful contribution to exports. Between 1611 and 1614 the value of lead ore exported nearly equaled that of coal and was almost twice that of linen. The terms that the mine-owners extracted from the government were generous. In 1627 Mr. James Galloway, the Master of Requests, and Mr. Nathaniel Udwart, a resident of Leith undertook the "casting of iron ordinance and shott" at the favorable terms of no cost for five years followed by an annual payment of £200 annual to the Crown for the privilege. ¹³ The following year. twenty-one year patent was issued to the Earl of Linlithgow to pursue "a true way of making saltpeter powder and match." Charles was so pleased with the potential for this critical war-making resource that he gave the Earl extensive privileges. The Earl had the power to: "Enter, break, open, dig, search, and work for saltpeter, as well within the houses, lands, grounds, and possessions of his Majesty, his heirs, or successors, that now be or hereafter shall be, as also in vaults, cellars, towers, castles, stables, dowhouses, grounds, or possessions of any of his Majesty's subjects within the said Kingdom of Scotland." The only adjustment the magistrates of Edinburgh could achieve was to restrict the Earl to invading only those houses whose owners had consented.¹⁴

Charles enthusiastically agreed to such long-term concessions because they offered his kingdom a degree of self-sufficiency of resources that "in former times . . . were brought from beyond the sea." He recognized the importance of the capacity to provide his own war materials being "hardly such store gott as might strengthen and suffice the country." Mining was relatively novel to Scotland, although the growth of

Edinburgh was stimulating a market. The lack of indigenous coal supplies within the United Provinces also created a demand from Dutch merchants.

Although small-scale working at a number of sites produced a fluctuating output, the principal mining filed lay around Leadhills on the watershed between Clydesdale and Nithsdale. In 1638 the mines there came into the possession of Sir James Hope and production was increased. By the mid-seventeenth century some fifty workers were producing three to four hundred tons of ore a year.

Some lead had been mined there in the late sixteenth century and now these areas were supplemented by the sinking of shafts under the Forth as well as further efforts in the Lothians. Charles noted that he was gratefully pleased to advance and further all such designs as may bring within the same [Scotland] the practice of all profitable and useful works not formerly known there."¹⁵

Unfortunately the Scottish iron industry was hampered by a lack of suitable ore as well as fuel. This explains the substantial imports of Swedish iron. Possibilities for developing larger charcoal blast furnaces in the Highlands were being considered which prompted an Act of Parliament in 1609 forbidding the setting up of 'yrne mylnes' in the region to prevent the destruction of forests. But Charles needed this kind of industrial production and encouraged its expansion. Sir George Hay, appears to have completed a deal with Mackenzie of Kintail by which Hay received access to woods around Loch Maree. He used his interest at court to obtain exemption form the 1609 Act and by 1610 a blast furnace, the first in Scotland, was operating on the shores of the loch, aided by English technology and possibly English capital.

In the event when war loomed on the horizon in the late 1630s, the Covenanters worked hard to prepare their munitions. "Many of the like" were casting bullets but it was not enough. ¹⁶ The Scots sought external sources of supply, even turning to England (ironically) for materials. In December, 1639, they spent 5,000 merks bringing lead to Scotland for the casting of bullets. ¹⁷

When in 1629 Charles was preparing his realm for oversees conflict he had foreseen the need for the Scots to build upon their enterprises and had encouraged the munitions industry by supporting the production of cannon through grants to patentees to use the bog mines of the Crown: "We are informed by the patentees for making of iron cannon there that the work, being now begun and in good way to continue, may notwithstanding in a short space…be possibly interrupted for want of [a] bog mine if it should not be upon occasion supplied from the next neighboring places."¹⁸

While the pace of mineral extraction was progressing, so was the rate of urbanization in Britain. Although rapidly diminishing in importance, the largest towns still featured walls, or portions of walls, along their perimeters. In previous centuries, walls had traditionally served as the clear division between town and country and in doing so had performed a variety of functions. They granted local authorities positive control over the movement of people and goods in and out of a town. Tolls could be collected at gates or ports that could then be closed at night or during times of danger. Vagrants could be denied entrance and towns' residents sealed within if plague struck. By the seventeenth century, only a few towns maintained their walls.

John Major, writing in 1521, correctly observed that the Scots put their faith in the prowess of their armies and not in defended towns. The sheer cost of fortifications meant

that few towns could afford to upgrade medieval walls to the new, expensive technology of artillery defense. Nevertheless, some towns did upgrade their medieval-era architecture, or at least the town fortifications located at the commanding point of the town; Edinburgh, Dundee, Perth, and Stirling among them.

Sometimes town officials faced particular concerns that demanded continued attention. For instance, the inhabitants of Peebles built an entirely new wall with towers and gun loops as late as the 1570s following attacks on the town by raiders operating near the Border. In other towns, however, walls symbolized the desire of burgesses to defend their burghs against infringement by unauthorized traders rather than armed aggressors.

It is most likely that population trends in England and Scotland were roughly comparable during the sixteenth and seventeenth centuries. Scotland also appears to have been the only European country to share the English pattern of a steady expansion of urban population throughout the period irrespective of whether national population totals were growing or stagnating.

Many scholars have estimated that around 1500 the population of Scotland totaled in the 500,000 to 700,000 range north of the border and somewhere around, or just under, one million by the Stuart period. Less than two percent of the population of Scotland lived in towns with more than 10,000 inhabitants. In comparative terms, that number appears consistent with English population statistics. This figure suggests a density of eleven people per square kilometers in Scotland compared to forty-four in Italy, thirty-four in France, thirty-six to forty in England, thirty-seven in the Low Countries, and twenty in Ireland.

The tax levied by the Covenanters in 1639 on the basis of valued rent offers some indication of the size of Scottish towns. Returns indicate that eleven towns boasted a population above 4,000 but this included Edinburgh's suburbs of South Leith and Canongate that counted together nearly 20,000 inhabitants. The largest city in Scotland was Edinburgh, with a population of approximately 35,000 followed by Aberdeen, Glasgow, and Dundee, each having more than 20,000. Twenty-three towns enjoyed a population between 1,000 and 4,000 residents while another fifteen had populations between 500 and 1,000. In England, London dwarfed all other cities with well over 300,000 inhabitants, making it the largest city in Western Europe. England's population overall was just over five million, with another 350,000 residents in Wales. ¹⁹

Edinburgh held a much smaller percentage of Scotland's population than London did of England's, but the rest of the Scottish urban hierarchy was unexpectedly similar to that of England. The proportion of Scotland's population living in centers with over 2,000 inhabitants in 1639 may have been as great or even greater than in England, even allowing for the fact that English towns grew substantially between 1600 and 1639. Although the dominance of London over English urban systems contrasts with Edinburgh's smaller proportion of the Scottish population, at lower levels the English and Scottish hierarchies were not markedly different from each other or from patterns established on the continent.

As already discussed, an important influence on population trends was Britain's high level of emigration. From medieval times, Scots and Englishmen assumed prominent positions in many parts of Europe as scholars, soldiers and traders. Scotland had a long tradition of supplying mercenaries to foreign armies. Many Scots were

involved in wars in Ireland in the late Middle Ages. During the Hundred Years' War significant number of Scots fought in France against England. The Scots Guard in France and Scots Brigade in Holland were full-fledged and long-standing military units. Scandinavia was another important destination for Scottish soldiers. While many soldiers did return home, many did not. From 1625 to 1642 licenses were granted for over 45, 000 men to leave Scotland. 22

Emigration for less warlike reasons also occurred on a significant scale. During the Middle Ages, had indicated Scotland's traditional incapacity to support its population. But Scottish migration underway at the time of James accession was indicative of the growing prosperity of the local economy. In many cases it was only the acquisition of property and material wealth at home that provided colonizers the substantial stake necessary to move abroad.²³ The Plantation in Ulster also fostered trade and emigration. The settlers, who numbered more than 50,000 by the time of the Bishops' Wars, naturally looked to their homeland for the purchase of their implements and goods.

Overall numbers of traders abroad were considerable judging by the size of the merchant communities in individual cities. For the first half of the seventeenth century in Scotland alone, a net outflow of 85,000 to115,000 has been suggested, a loss of perhaps 2,000 a year, most of them makes between the ages of fifteen and thirty. Perhaps twenty percent of all young men left Scotland at this time. Many Dutch and Baltic ports had substantial Scottish groups. Scots were active as peddlers, merchants, and craftsmen in Scandinavia and the Baltic from the end of the fifteenth century. In the early seventeenth century, the number of Scots in Poland, many of them small merchants, has been estimated at 30,000 to 40,000. In the first four decades of the seventeenth-century wave

after wave of emigrants left Scotland pushed out by population pressure and attracted by opportunities abroad. The Ulster plantations in the early seventeenth century attracted a substantial flow of colonists.

These emigrant contacts to Europe also affected the practice and organization of urban incorporations within Britain as European models were repeated. Urban incorporations were essentially organizations of craftsmen whose members had a monopoly in the practice of their craft within a particular burgh and its surrounding area. This form of urban organization, coupled with the emerging to locally produce weapons, materially aided the military leaders after 1640. Scots and Englishmen alike were able to secure the arms they needed to prosecute military operations.²⁴

Inventories of armorers' wills reveal substantial wealth held by some. ²⁵ The production of arms was a relatively profitable undertaking in Britain. James Hunter of Edinburgh died in 1580 with £181 of goods, including large numbers of swords, blades, and guards. The same can be said of Andrew Softlaw, who expired in 1583 with materials valued at £83. John Kar of Dunfermling's estate was worth £239 in 1588, while the Edinburgh evaluations of Thomas and George Hislope's estates rated their goods at £145 and £210 in 1600 and 1605. George possessed over one hundred swords and blades at the time. Of interest, another Hislope, having made the transition from cutlery to gunmaking, died in 1646. John Hislope possessed a musket and bandolier embedded with pearls when he expired, a suggestion that some arms at least, were ornamented and proudly maintained by their owners.

The manufacture and trade of arms was a relatively expensive undertaking. On average gunmakers made £4 to £5 monthly but the price of their materials were high as

well. Sometimes gunmakers died before turning a profit. In 1596 George Richmont died with £53 on hand, but £409 of debt for pistols, hagbuts, and stocks owed to six different agents. There were clearly several kinds of arms available in Scotland as can be glimpsed from such accounting of equipment rostered in gunmakers' wills. David McBend died in 1626 with one musket, staff and bandoliers on hand, valued at £11 6s 8d. He also possessed eight pairs of Braisin pistols worth £20. The going rates for the services gunmakers performed were also indicated in wills. Jon Donyng paid twenty shillings for the dressing of one musket, while the Laird of Bararahame paid twenty-six shillings for the same and fifty shillings to have his bullet box boarded neatly.

There is no doubt that arms industry in Scotland lagged behind that of England. Yet, the general presence of arms makers in Scotland became more pronounced in the decades preceding the Bishops' Wars. Edinburgh and Canongate, Scotland's most significant urban concentration, tell the story. The number of armorers increased from forty to eighty-nine, the number of bowers grew from nineteen to thirty-nine, and most importantly for contemporary methods of warfare, gunmakers nearly doubled, from forty-six to eighty. Gunmakers passed armorers as the most substantial of the trades, reflecting Scots' growing exposure to European ways of warfare. Arms makers also seemed to be undertaking a general migration out of cramped Edinburgh itself and seeking more spacious accommodations within the suburb of Canongate.

At the end of the seventeenth century, the institutions of the two burghs were becoming more and more intermingled, and although they remained nominally separate, the Canongate became formally subordinated to the Edinburgh Council in 1639. More

and more craftsmen became members of both incorporations and burgesses of both burghs, presumably for the freedom of movement that the double membership conferred.

Such would in part explain the slight drop in cutlers and gunmakers in Edinburgh and the consequent precipitous rise of the same trades in Canongate. The other arms manufacturers clearly diminished in importance over time, not just within the Lothians, but also throughout the country. Given the more rudimentary manufacturing capacity and lower population of the towns away from the capital, that gunmakers were twice as prominent as any other trade in Dundee and the largest in Glasgow. Only in Perth, with a small sample of six armorers, five cutlers, and four gunmakers, were firearms produced on par with traditional bladed weapons.

Of course, the Scottish industry itself did not account for all of the arms in the country. Much armor was imported from abroad, both from France and from the Netherlands, or was made in Scotland by foreigners working directly for the King. And as the Scots contemplated war in the 1630s, they aggressively sought weapons and ammunition with which to oppose the crown.

The Marquess of Hamilton noted in 1638 that the Covenanters were "still sending for more armes and ammunitioun not onlie from Hollen but lykuys from Hamburg, Breme, Lubick, Dansick, and Sued, that if one part should faill they may be suppleud from ane other." The Scots were successful enough to gain permission to ship nearly a dozen field pieces and 2,000 muskets with quantities of ammunition during the summer of 1638 alone. Christian IV of Denmark had issued Danish Royal missives to armed Covenanters to pass through the sound under the command of a Scot, Colonel Robert Monro. An indication of the direction of Scottish trade on the eve of the war is found in

the fact that the Scots paid more in Sound Tolls to the Danes in 1639 than in 1638. (But so did the English; seemingly the Danes supplied both sides). Not all trade in arms was conducted with official blessing however. An Irish trader captured in 1640 by the English confessed that he was carrying 300 muskets in addition to the wine listed on his manifest.²⁹

Given the relatively mature economies, growing manufacturing trades, close integration with European market centers, and rising population and urbanization of England and Scotland before 1640, it is less surprising to find that the units of the Covenanting, Royalist and Parliamentarian armies possessed many similarities with continental armies.³⁰

¹T. C. Smout, *A History Of The Scottish People*, *1560-1830* (William Collins and Sons, 1969), 188-125.

²Allan I. Macinnes, Charles I and The Making of The Covenanting Movement, 1625-1641 (Edinburgh: John Donald Publishers, 1991), 31-34, and Smout, 118-119, 123. The most common form of rural settlement in Britain consisted of a small community organized around a farm that provided employment and foodstuffs. The administration of the farm could be handled in several different ways. A single husbandman might practice tenancy of the whole and cultivate it independently with the labor of lesser men, who would act as subtenants and servants. As was more frequently the case, several husbandmen, who could number anywhere from two to several dozen, were banded together to share the operation and produce of the farm between them as joint tenants. Such an arrangement obviously involved any number of specific agreements be made by the tenants to determine all manner of questions necessary to the community: the type of crops to grow, the rotation of crops, pasturing and use of animals, dates and divisions of labor for sowing, reaping, and cultivating, not to mention division of the farm's harvest. However, by the seventeenth century, even in such multiple tenant farms the land was often apportioned specifically to individual families rather than being periodically reallocated. Such a shift was indicative of the trend towards economic individualism then underway in Britain's agricultural sector. The more generous climate and open topography in England probably lent even more flexibility in choice as to what to grow in the open fields. In Scotland on the other hand, variations were less feasible because the range of crops that the land could support was much reduced, although the Scots practiced several procedures to increase their lands' prosperity.

Arable lands were divided into two types: outfield and infield. These terms did not describe the land in terms of proximity to the center of the farm, but rather indicate the degree of fertility of the soil. Outfield lands were poorer and could only be farmed by alternating several years of fallow with several years of a nutrient-replenishing crop such as oats. Scots undertook to transform outfield lands into more productive assets through the clearing and burning of peat mosses and the use of lime to improve soils' usefulness. Infield lands, while perhaps normally only a quarter or less of the total tillable area, were fertile enough to bear grain crops year after year without ever enjoying a fallow break and provided most Scottish crops.

Infield lands carried several crops. Barley normally occupied about a third or a quarter of the total infield land and gave an average return over the whole country of something like four or five grains to every one sown. A further quarter of the infields were typically sown with wheat and sometimes peas and beans. Flax and hemp, where the conditions permitted, were also infield crops.

The numbers and kinds of animals kept on farms varied. In Scotland's Lowland districts and in much of England in the south, the plough team, either oxen or horses, was the most essential. Many families kept at least one dairy cow to provide milk, cheese, and butter. Where the soil prevented significant crop yields, particularly in the southwest and the Highlands, herds of beef-cattle could be found in more predominant numbers. Goats were also an important source of milk, meat, and hides in the Highlands. The local peasantry consumed most of these products, but the distinctive and varied topography of the country encouraged a balance of goods within the agricultural sector of the economy and in times of plentiful harvests, a significant market exchange of goods. In the Highlands wealth was measured in terms of cattle, sheep and goats. Usually enough oats could be grown to sustain the herds, although the region as a whole typically imported grain in exchange for animal products.

What all of this meant for foraging armies was that provisions were typically available in the countryside but only in limited quantities. Few people starved in early modern Britain under normal circumstances. But successive poor harvests, outbreaks of the plague, and especially war, could drastically upset normal distribution patterns.

³Affecting all aspects of the economy was the fact that the sixteenth century was an inflationary period in Britain as elsewhere in Europe. Price rises seem to have been relatively modest before the 1560s but between then and 1600 the cost of many basic commodities rose three, four, or even six times. Wages appear to have increased in the fist half of the sixteenth century, then stabilized. They lagged behind price rises until the 1590s before accelerating again to reach a plateau by about 1615 after which they altered little. Scotland was especially hit hard. The rate of exchange of the Scots pound against the English shifted from approximately 4:1 in 1560 to 12:1 by the time of the Union in 1603. Depending upon the season, the cargo, and the destination, this diminishment of the value of Scottish coin sometimes prejudiced the Scots' trading relationships (although Scottish trade overall profited after 1600).

⁴ Marguerite Wood, ed. *Extracts From The Records of the Burgh of Edinburgh*, 1626 to 1641 (Edinburgh: Oliver and Boyd, 1936), 51, 85.

⁵Ibid., 104, 152.

⁶Ibid., 224.

⁷Peter G. B. McNeil and Hector L. MacQueen, eds., *Atlas of Scottish History to 1707* (Edinburgh: The Scottish Medievalists and Department of Geography, University of Edinburgh, 1996), 328.

⁸One example of the creative nature of early-modern financing includes a tax on the production of "gowlfe ballis." It seems that James Melville, quartermaster to the Earl of Morton's regiment, maintained that he had received from James the privilege of exacting a tax on every golf ball made in the kingdom. When two ballmakers in Leith, William and Thomas Dickson, refused to pay the tax, Melville dispatched a number of "lawlesse souldiers." The vigilantes stole a specially made, 19-ball set that Melville presented to the king. *RPCS*, Vol 3, 1629-30, 174.

⁹For instance, only when famine began its march would the attempt be made to buttress grain stores by banning exports, prohibiting hoarding, and imposing price controls. Likewise, the government inconsistently applied and then removed export duties on items such as wool and cloth not because of any long-term comprehension of the economy, but rather in response to the petitions of interest groups.

shillings (s.). Hence, 1 Shilling Sterling = 12 pennies (pence) (d.). Since the introduction of the penny into Scotland during the reign of David I (1124-1153), devaluation of Scottish currency had proceeded until about 1600 when it was stabilized at 12:1 (e.g., £12 Scots = £1 English). At that time Scottish coins contained only about one-fifth of the silver or gold used in coins of the same value issued at the end of the fifteenth century. It remained at this approximate level through the early Stuart period. A Merk (known as the Mark in England), was a unit of value used in Scotland (not a minted coin) that was equal to two-thirds of £1 Scots (i.e., 1 Merk = 13s., and 4d. Scots; likewise the Mark was equal to 160d. or 13s. 4d. English Sterling, and the Half Mark was worth one-half of the Mark).

Minor denominations included:

Groat = 4d.

Penny

Half-penny

Farthing = quarter penny

See J. D. Mackey, *A History of Scotland* (London: Pelican Books, 1964; Second Edition, London: Penguin Books, 1978), 10. (page citation from the second edition); and Rosemary O'Day, *The Longman Companion to The Tudor Age* (London: Longman, 1995), 255, 256.

¹¹Macinnes, 33.

¹²For neither port is there a continuous sequence of accounts. The Dundee lists include only incoming ships; the Aberdeen figures also include outward bound vessels. The origins of 9.9 percent of the former and 24.3 percent of the latter are unknown and have been omitted from the charts. The Dundee lists do not include Scottish arrivals, except for the Northern Isles.

¹³RPCS, Vol 2, 1627-28, 64. (Hereafter RPCS). The sources skeptically note that Galloway and Udwart purported that their work was motivated strictly "out of their respect for the service of the country."

¹⁴RPCS, Vol 2, 1627-28, 333.

¹⁵Ibid., 338.

¹⁶NAS, GD112/39/67/27, 31 December 1638, Archibald Campbell to the laird of Glenurchye.

¹⁷Marguerite Wood, ed. Extracts From The Records of the Burgh of Edinburgh, 1626 to 1641, 224.

¹⁸*RPCS* Vol 3., 151.

¹⁹Ibid., 320. Also see Smith, *The Double Crown*, 415 and Coward, *The Stuart Age*, 29.

 20 The prevalence of Scottish towns does not supersede the conclusion that in overall terms, Scotland remained largely a rural state.

²¹For discussions see: Stephen Porter, *Destruction In the English Civil War* (London: Alan Sutton Publishing, 1994), 4,5; Charles Carlton, *Going to The Wars: The Experience of the British Civil Wars, 1638-1651* (London: Routledge, 1992), 7-30; Lindsay Boynton, *The Elizabethan Militia, 1558-1639* (London: Routledge, 1967); Elizabeth A. Bonner, "Continuing the 'Auld Alliance' in The Sixteenth Century: Scots in France and French in Scotland," and Paul Dukes, "The First Scottish Soldiers in Russia," in *The Scottish Soldier Abroad*, ed. Grant G. Simpson (Edinburgh: John Donald Publications, 1992), 31-46, 47-52.

Some estimates of the total number of Scottish soldiers and colonists living overseas run as high as 100,000. See Macinnes, *Charles I and The Covenanting Movement*, 31.

²²See the next chapter for a full discussion of Scots' overseas military pursuits.

²³Macinnes, 31, 32.

²⁴ Minute Books were ideally a complete record of the guild. They were intended to list the names of apprentices as they were bound, and freemen as they were admitted, with the fees that they paid and sometimes the test-pieces the men completed. The annual elections of officers (Deacon, Council and Boxmaster, or treasurer), and the presentation of their accounts and proceedings at general meetings of the incorporation, were also to be recorded in the same book. Since the incorporations often acted as charitable organizations, expenditures for assistance to elderly freemen, or loans to temporarily embarrassed masters, as well as funerals (with the coffin paid for by the incorporation's 'mortclaith'), and assistance to their widows and orphans were to be noted too. But of course, their clerks did not keep Minute Books to the degree of accuracy the historian would wish.

²⁵Inventories from craftsmen's wills can be found in the Edinburgh Commissariot Testaments, (ECT), NAS CC8/8

²⁶Barter, Sara, ed. *Scottish Arms Makers* (London: Arms and Armour Press, 1977), 136.

²⁷NAS, GD 406/1/10491, 24 June 1638; Reprinted in S. R. Gardiner ed., Hamilton Papers, Being Selections from original letters in the possession of His Grace the Duke of Hamilton and Brandon relating to the years 1638-1650 (London, 1880), 17.

²⁸Public Record Office (hereafter PRO), SP 81/45, Roe to Cooke, 7 December 1638.

³⁰A number of works provide overviews of Civil War tactics. Many are unfortunately superficial. For the following discussion I have drawn heavily from Edward Furgol. Not only does he deal with the Scots in particular, he has drawn on a wide assortment of sources for his analysis.

²⁹CSPD, 1640, 63. Interrogation of Peter Melch, 22 April 1640

CHAPTER 4

TACTICS AND ORGANIZATION

Neither England nor Scotland had a professional standing army when war broke out in 1640. Beyond a few companies guarding various armories, both King and Parliament first turned to the trained bands for support. The trained bands were essentially a militia that was to be raised in times of emergency to provide a force for national defense.

Created by Queen Elizabeth when she realized that her state required competent armies, the establishment of the trained bands increased the authority of the lieutenancy, improved the militia, and retained a system of national levies. The trained bands gave rise to a new type of county military elite, men who received (theoretically), an unprecedented ten days' training every year. The mission of the trained bands in each shire was to drill seasonally in order to learn the art of war. Elizabeth's military reform program set the conditions under which James and Charles would labor without any great change. The bands were organized at the county level but their musters were widely uneven in terms of both frequency and quality of the training. Edinburgh in fact held annual musters from 1607 to 1637, and the London Bands were probably the most proficient in all of Britain. Yet overall, between 1603 and 1638 the Privy Council authorized few musters or weapon-showings (wapinschaws) for the shires.

In part this was probably due to the fact that when Charles tried to restore military ardor in the 1620s he behaved so tactlessly that for many, "military" and "arbitrary" became synonymous. The statutory ambiguity of the King's military program associated the issues of militia rates and muster-master pay with the grievances of the 1620s and

hence many looked upon it with great suspicion.² When musters did occur, they were one type of occasion during which the possession of military tracts from the continent would have been most needed and productive. But to supplement the bands, both English and Scottish authorities immediately resorted to the raising of regiments under men who possessed prior military experience and received commissions for the explicit purpose of organizing and training troops.

Soldiers returning from overseas certainly internalized a sense of military professionalism. James Turner, Robert Monro, Prince Rupert, Leslie, Fairfax, and others who returned from the continent were comfortable with the prevalent military art as soldiers prepared to greet war in their native land with professional assurance. Some even exhibited a mercenary spirit. As Turner commented, he had "swallowed without chewing, in Germanie, a very dangerous maxime, which militarie men there too much follow; which was, that so we serve our master honnestlie, it is no matter what master we serve."

Appreciating the value of such military experience, the Covenanting government in Scotland most aggressively sought men who could boast of military accomplishment. The Scots in 1640 required that the lieutenant colonels and majors of each regiment, and the ensign and the two sergeants of each company, be veteran soldiers. Thus, thirty-two of a regiment's seventy commissioned and noncommissioned officers were to be veterans. This would prove critical to the Covenanters success as the tactical control of their army was in the hands of men who had led troops on the continent. The social-class makeup of the leadership of the Covenanting armies was quite different from any earlier military host in Britain. In essence, the requirement for men in certain positions to possess a degree of military experience serves as grounds to assert that the tenets of

military revolution were familiar and probably seen as critical to success on the battlefield. The structure of Scottish military commands suggests a crucial change in what was considered acceptable for the conduct of war. The earlier feudal model with its inherently ad hoc methods of organization and its basis in the private manipulation of violence was discarded as a viable solution to the problem of military organization. Thus during the Bishops' Wars Scottish noblemen raised more regiments than retinues, their localities were defended by ordered militias and not by local dependencies, and all was overwatched by national war committees.⁴

The English would be late to recognize the utility of experience at the tactical level, but the Parliamentarians would eventually seek veterans as well, while the Royalists retained a firmer commitment to men of station (many who did, however, have experience on the continent). This was because the Royalist armies under Charles inherited the powerful and entrenched military institutions of the English state and thus did not require the creation of new offices, but when Cromwell generated his New Model Army, he followed many of the practices of the Covenanters. Experience and competence mattered for the Parliamentarians and those officers who could perform on the battlefield earned positions of authority.

The basic model of infantry organization adopted by each side consisted of a regiment of ten equal companies of one hundred men for a total strength of one thousand.⁵ A variant sometimes practiced consisted of "unequal" companies: a Colonel's Company of two hundred men, a Lieutenant Colonel's company of 160, a Sergeant Major's of 140 and seven Captain's companies of one hundred men each. In addition to the officers at the head of these line units, a typical regimental staff consisted of a

quartermaster, provost marshal, surgeon, preacher, wagon master, drum major, and several surgeon's mates.

The theoretical basis of equal proportions of musketeers and pikemen in an infantry formation came under increasing pressure through the 1630s as commanders recognized the firepower benefits of the musket. Of course, it was necessary to retain a number of pikemen to fend off a determined charge of cavalry but the presence of the pike was clearly in decline. Pikemen and musketeers were not organized in separate companies, but each company had a proportion of each. Later in the war ratios approaching two muskets to every pike became the norm on both sides. At the time of Newburn and Edgehill, however, supply constraints meant that the one-to-one ratio was more likely.

The pikemen were armed with pikes that were officially eighteen feet long, although typically the fifteen to sixteen foot stave of well-seasoned ash was carried. The slim steel head was socketed to the end, with long metal strips projecting between two and four feet down the sides of the shaft and riveted to it, to prevent opportunist cavalrymen from lopping off the business end of the weapon. Its unwieldy value rested on its use en masse, to provide a defensive hedge of points or to force formed bodies of enemy foot from the field. The basic design of the pike was not new and had been carried for generations by soldiers in Europe.

The more profound tactical developments of the period involved arms. Lighter muskets were being introduced (less than twenty pounds), that did not require a musket-rest to fire. Most of the muskets used at Newburn and Edgehill were matchlocks. The effective range of these smoothbore weapons was typically no more than fifty meters.

The firing mechanism consisted of a match-holder or cock connected to a lever (sear lock), or trigger (trigger lock), which projected under the butt of the weapon. When pressed towards the stock, the lever brought the lighted match, a length of cord impregnated with saltpeter or vinegar, into a pan filled with priming powder. The resulting explosion propelled the ball out of the barrel.

The use of the matchlock entailed both rewards and risks for the infantryman. On the one hand, the weapon could be fired even if the lock assembly were broken by merely touching by hand the lighted match to the powder in the priming pan. On the other hand, lengths of smoldering matchcord amidst closely packed ranks of soldiers in the chaos of battle posed definite hazards. Likewise, large amounts of matchcord were needed, and under conditions of limited visibility, the lighted matchcord made for easy targets for the enemy. The heavy, low-velocity ball inflicted massive splintering wounds on any solider unfortunate enough to be hit.

Another type of musket, the flintlock, was also in use during the wars but in less number. Flintlocks dispensed with matchcord by the action of a flint striking steel held over the pan. Thus it eliminated many of the hazards associated with matchcord, but the firing mechanism was more complex and hence not as reliable as that on the matchlock.

Soldiers improvised expedients to assist their chances of successfully operating their weapons in combat. Many carried the "Twelve Apostles," premeasured powder charges hanging from a leather belt in small wooden containers and slung over the shoulder. Bullets were carried in a bag slung from the same belt. Other pieces of individual kit included a small flask with priming powder, a larger flask with coarse

powder for replenishing the containers, a length of match (if using a matchlock), and a sack with any rations or clothes.

This quantity of equipment meant that the individual soldier was asked to bear a heavy load. At least a small measure of comfort could be gleaned from the fact that by 1640 the wear of body armor was in rapid decline. The greater amount of marching and the more fluid tempo of battle had rendered such encumbrances obsolete. What now appeared were some measure of standardized uniforms. They did, however, vary widely owing to county preferences, availability of cloth, and the choices of the regimental colonels. Often, accessories such as ribbons, caps, and cuffs were used to designate units.

The infantry helmet fell into disuse during the Civil War, due to its weight and general awkwardness. The general style was that of a basin-shaped skull with a wide brim and a reinforced central spine or comb. It was tied or buckled under the chin by thongs or straps, the upper parts of which were fitted with steel plates to protect the sides of the face.

A wide-brimmed felt hat was more popular with the musketeers, and gradually came into favor with pikemen as well. With a fairly high crown and often decorated with a feather or a plume, the 'slouch' hat was a simple, utilitarian item of everyday outdoor wear, which became practically universal.

During the later years of the Civil War troops were provided a coat or "cassock," especially troops of the Parliamentarian New Model Army. This was a combination of jacket and overcoat, a long-sleeved, button-through garment which reached initially to the hipbone but later became much longer. It was possibly lined in regimental colors. Shirts and doublets were still worn under the cassock, but would only be visible if the

latter was worn unbuttoned. Trousers or breeches would have been of a drab color, grey being mentioned by name. The most popular style was a loose, baggy cut garment gathered just below the knee and tied with a band. Completing the outfit were low-sided leather shoes with ties or buckles in the front.

Attire for the horsemen was slightly different. The standard cavalry helmet was the "lobster-tail pot." This had a round skull with attached front peak, neck-guard and ear-guards. Neckguards were often of true or simulated "lames" that is, narrow horizontal strips riveted along the edges. Some styles featured a face guard of one or three bars dropping vertically from the peak, while others had none.

The use of armor in the cavalry, as in the infantry, was on the decline. The coat of buff, or more precisely cowhide, was the basic garment of the cavalryman throughout the Civil Wars. It could be worn with or without the additional protection of a metal back and breast cuirass. Some buff coats had long decorated sleeves, while others did not or had long sleeves buttoning up their whole length which were often worn open and thrown back from the shoulder. Trousers for the cavalry were of a dull color and hard-wearing materials. They would often be of a tighter fit than the baggy infantry style, sine they had to be worn tucked into the riding boots. There were of thigh length, and when pulled up fully for riding, gave considerable protection. The shoes were generally square and the heels fairly high. Massive spurs were normal, with large "butterfly" guard leathers at the instep. The bucket tops of the boots could be folded down when dismounted, and special over-stockings called "boot hose" were normally worn under the boots to protect the finer hose worn next to the skin.

Cavalry regiments typically opened a campaign with a complement of six troops of about seventy officers and men, a total of approximately 420, something short of the ideal five hundred theoretically called for in much of the literature. Regiments on all sides were seldom at full strength by the time a battle was reached. Troops often averaged about forty men when fighting, the rest having been dispatched on various errands or having suffered injury to self or horse. Royalist regiments generally had three field officers: colonel, lieutenant colonel, and major. Parliamentarian regiments only had a colonel and a major. In battle troops were often grouped in pairs to form squadrons or divisions.

Mounting the cavalry was a major challenge. One technique was to recruit men who already owned horses. When a horse was killed or injured, the owner would be reimburse--at least theoretically. To mount those without horses, King and Parliament sought contributions from supporters, sometimes with the promise to remunerate the owner, sometimes merely as acknowledged gifts. And of course, mounts could always be stolen from the enemy.

The King possessed the finest commander of cavalry in England in 1642 in the person of Prince Rupert, whose presence gave the Royalists a decided advantage early in the Civil War. A student of warfare experienced on the continent, Rupert organized the Royalist cavalry along Swedish lines. Royalist formations were usually three deep and relied upon a swift charge against the enemy to break his ranks with cold steel. It was a frightening, effective method that often achieved decisive results.

Parliamentarian horse was not as capable as the Royalist until later. The

Parliamentarians tended to rely upon firepower, often delivered one rank at a time, to

inflict casualties prepatory to a charge. However, since the intent of Rupert's Royalists was to aggressively attack at the earliest possible moment, they tended to deny the Parliamentarians the time to implement their tactics.

Subsequent to the charge, commanders often lost control of their cavalry, particularly as horsemen most often struck the flanks of enemy formations and thus quickly passed away from the central battle area. Such would be the case for the Royalist horse at Edgehill. Only with time would commanders learn the importance of retaining positive control of their horsemen. Cromwell's return to the battlefield at Naseby would prove one such example.

The role of the Dragoon was a relatively innovative development. Part infantryman and part horse soldier, dragoons were mounted but were not armored in any sense and not trained to fight in mounted formation as were the cavalry. They typically possessed a mix of firelocks and carbines for an offensive punch, but lacking the protection of pikes, could not hold ground against enemy formations unless under cover of some sort. Consequently they fought little sustained action on foot. However, their flexibility allowed them to perform many missions: reconnaissance, guard, messenger, and forager, to name a few. At Edgehill the Royalists had three regiments of dragoons and the Parliamentarians two. Their precise organization is obscure, but may be deduced to have had an established strength of 1,000 organized in ten companies.

As for artillery, almost every army that took to the field between 1640 and 1646 possessed cannon, often with decisive effect such as at Newburn. Field guns had many names and calibers. The heaviest was the culverin, which could fire a ball of sixteen to twenty pounds over a maximum range of some two thousand meters, although eight

hundred meters was more typical. The demi-culverin fired a nine-to-twelve pound projectile to about one-half the range of the culverin, while the saker, probably the most commonly used field piece, had a ball weighing five to six pounds. Powder was carried in barrels and ladled into the guns. Normally the projectiles were solid spherical shot of stone, lead, or iron, but shells which were simply spherical iron cases full of powder with short lengths of fuse were beginning to appear.

Field guns generally had a crew of three: a gunner who supervised and positioned the gun, a gunner's mate who loaded, and a helper. Guns could fire at a rate of approximately ten to fifteen rounds an hour. When possible, the artillery was positioned as batteries and protected by gabions, earth filled baskets. Regular officers and gunners, as well as civilian contractors, manned the pieces, as was a common practice in early modern armies. There were not a standard number of guns for an army, but the armies of the Second Bishops' War possessed at least one train of at least sixty pieces and as the Civil War progressed, trains often exceeded this size. The New Model Army also had a strong artillery train. Initially of fifty-six pieces of various calibers, the artillery doubtless grew in size as captured equipment was absorbed. Two companies of firelock-equipped infantry accompanied the artillery. The role of these infantry was the protection of the gunners, the artillery train, the powder store, and the wagon park generally. A company of pioneers was attached to the main artillery train. Their function was to assist with the passage of the artillery train, which moved slowly and needed between six and eight horses or oxen per gun.

It can be seen then, that the artillery arm was in the process of transforming itself from one only concerned with the defense and reduction of fortresses, to becoming an

active component of maneuvering armies. Most pieces remained heavy and difficult to transport, but improvements were steady.

Like those of the continent, armies of both the Bishops' Wars and Civil War were of substantial size. In 1639 the Covenanters occupied Aberdeen on four occasions; the first army consisted of between nine and eleven thousand men, the second had four thousand men, the third possessed seven thousand men and the fourth was four thousand strong. Meanwhile in the eastern borders General Leslie commanded between twelve thousand and twenty thousand men. An unknown number served in the defense of the Forth coastline. In 1640 Leslie invaded England with an army of 17,775 foot and horse. Following the Irish rebellion of October 1641 the Covenanters arranged with the English parliament to send an army of ten thousand men to Ulster to help crush the Irish. However, by autumn 1642 they had sent over 11,371 men and officers. This they achieved despite no formal organization of separate identity prior to 1638-1639.

The Royalists and Parliamentarians would likewise achieve remarkable feats of organization to deploy substantial armies. The forces on the field at Edgehill numbered in the neighborhood of twenty thousand men, while nearly fifty thousand assembled to fight at Marston Moor in 1644. When Parliament fielded the New Model Army in 1645, it too was a robust force.

The final ordnance establishing the New Model Army called for twenty-four regiments: twelve of infantry, eleven of horse, and one of dragoons, with a combined strength of 22,000 men. Over two hundred suppliers were contracted to support the New Model Army alone, although the men were frequently forced to rely upon the free quarter extracted from civilians, a heavy burden for any locality forced to bear it.⁶ Nonetheless,

the value of supplies leaving London for the New Model Army during its first year of existence was £116,823.⁷

Reflecting the growing complexity of military operations, the New Model Army possessed a surprisingly large staff. Serving directly under the commander-in-chief (Sir Thomas Fairfax in 1645) was the lieutenant general of the Horse (Oliver Cromwell initially). This officer ranked as the second in command of the entire army. Below him was the commissary general of the Horse, the second in command of the cavalry. Below the commissary general were two adjutant-generals of Horse; a quartermaster general of Horse. The cavalry staff was completed by a markmaster general of Horse and a commissary-general of Provisions.

The sergeant major general of the Foot had command of all the infantry in the army, and was the third-ranking officer in the overall hierarchy. To assist him he had a quarter master general of Foot and an Adjutant-General of Foot. The fourth ranking officer in the army was the lieutenant general of the Ordnance, who controlled the artillery and the engineers. Attached to the headquarters establishment was a judge advocate, with two provost marshal generals, one of foot and the other of horse. A commissary general of Victuals was responsible for victuals.

Reflecting their sense of élan and a newly-created sense of professionalism, the armies in Britain carried unit colors. The colors for the horse were carried by the most junior commissioned officer of each troop, the cornet. They measured about two feet square, and were sometimes termed guidons. The cornets of dragoons carried the same. Infantry colors were also known as ensigns, and were carried by the non-commissioned officer of that name. Because they did not have to be carried on horseback, infantry

colors could be much larger than the cavalry cornets--usually about six and one-half feet square, and were supported on a staff seven and one-half to eight feet in height.

The functions served by the colors were as much practical as they were decorative. On the battlefield they showed the rank and file where their units were situated, and where the individual soldier was supposed to be. They would also act as rallying points if the regiment broke under the stress of combat, and as a focus for regrouping. They were highly prized trophies whose capture was considered a particular insult to the enemy. As the following illustrations demonstrate, they were decorated richly.

In keeping with their high symbolic importance, colors were elaborately wrought from expensive materials. Accounts from the First Bishops' War show Montrose's Scottish army paying £4 and 15 shillings for each of its ensigns. The total cost per regiment was £61 and 15 shillings. for the thirteen ensigns that were deemed necessary. Fabrics were "the best duocape," taffeta and sercenet in a variety of hues, with mottos in gold lettering, the flags being supported on staves "with gold and silver heads and tassells."

So by 1640, both England and Scotland recruited, fielded and maneuvered armies that were nearly identical to those serving on the continent of Europe. The military revolution had been made manifest because its tenets were understood by military leaders, and the economy of Britain was sufficiently integrated to allow the materiel of war to be brought to bear. Britain was not a military backwater during the early Stuart period. Scots and Englishmen had been preparing to go to war for decades prior to 1640.



Figure 6. Covenanters Colors. Source: NMS. Photo by Author. 9

¹Cruickshank, 291. Appendix A provides statistical summaries of Elizabeth's levies.

²Fissel, *Bishops' Wars*, 177.

³David Stevenson, *The Scottish Revolution 1637-1644: The Triumph Of The Covenanters* (New York: St. Martin's Press, 1974), 130.

⁴For the First Bishops' War approximately 25 regiments and 27 retinues were formed; for the Second Bishops' War: 43 regiments and 7 retinues.

⁵The descriptions of tactical formations comes from several sources: Peter Young's *The English Civil War: A Military History Of The Three Civil Wars 1642-1651* (London: Eyre Meuthen, 1974), 34-58; and *Edgehill, 1642* (Windrush Press, Reprint, 1995), 17-37; Also Ian Gentiles, *The New Model Army In England, Ireland, and Scotland, 1645-1653* (Oxford: Blackwell Publishers, 1992), 40-49. For non-scholarly but very comprehensive, accurate and accessible information regarding the organization and tactics of forces, see Osprey Publications' (Oxford) series of short volumes.

⁶Gentile, 45. 90 percent of the New Model's rations were locally procured. Parliament provided only some bread and cheese. Soldiers were expected to use wages to sustain themselves. The good news for New Model soldiers was that between April 1645 and June 1647 the foot received 76 percent wages due them, and the horse received 58 percent, very high rates of pay for the period.

⁷Ibid., 40-43. In terms of expenses, the cavalry was at the high end. A horse cavalry horse cost about £50 while one for the dragoons could be as low as £2. Likewise cavalry saddles were twice as expensive as those used by dragoons. However, dragoons were still more costly to equip than the infantry. Dragoon muskets cost 20-30 percent more than matchlock muskets.

⁸PRO. WO49/68, fo.69.

⁹National Museum of Scotland Collections. Photograph by the author.

CHAPTER 5

SCOTLAND AND ENGLAND AT WAR

As the new year of 1640 approached, tensions in Scotland remained high. Preparations for war proceeded amidst the political posturing underway on both sides of the border. The Scots recognized that the Covenant could not be established without a decisive turn of events. After the months of wrangling, it appeared ever more likely that the King would not be forthcoming with a concession. A successful military defense, if not an outright victory, was necessary. As Sir Michael Ernley reported from Berwick on 28 October, "the Scots have given their officers satisfaction for the present, and have taken them into pay till May next." On 20 November, he wrote again: "Upon Saturday last, General Lesley came to Edinburgh. He tells them they shall command his service as they please, but more care and circumspection is to be taken now than ever, and a good sum of money must be though upon before they [commence] proceedings."² Leslie knew that much work was required before the Scots could muster a credible military response. He therefore set to work to survey the country's fortifications and began the collection of military supplies for the tasks ahead. Leslie would successfully lead Scottish military operations in the field. The Scots prevailed because they defeated their English opponents at the strategic, operational, and tactical levels of war. The decisive campaign that the Scots undertook in August, culminating in the Battle of Newburn, directly led to a favorable political outcome.

In 1640 the Covenanters would face a strategic situation that presented armed threats on three fronts: from the royalist-occupied castle in Edinburgh, from royalist supporters (or at least luke-warm Covenanters), in the north of Scotland, and against the

King's armies somewhere near or beyond the Borders. Each was different in nature, and each would have to be met successfully for the Covenanters to prevail. In contemporary terms, the Scots faced high-, mid- and low-intensity threats. To win this war, they would need to identify these threats correctly, and defeat them.

While the Covenanters organized their efforts, the English did not wait idly, and soon presented the Scots with the first military predicament of the second, albeit undeclared, war. In early February King Charles directed that men and ammunition be sent to reinforce the garrison holding the Castle in Edinburgh, and directed that the town's residents assemble to recognize his colors.³ The Covenanters were taken by surprise, and the new governor, the King's Muster Master General of Scotland, Patrick Ruthven (Lord Ettrick), cheerfully reported that he was now capable of withstanding a siege of six to nine months.⁴

The town and castle undertook a sporadic but determined attitude of mutual confrontation.⁵ Outright capture by the Covenanters as had happened in 1639 was not now a likely prospect. So burgh initially adopted an indirect approach: its residents prevented tradesmen from delivering supplies to the garrison. Ruthven was not intimidated and responded by threatening to bombard the city. This provoked the townsmen who were clearly displeased with the situation and considered that "the warres [had] already begune be the governour of the Castell of Edinburgh and garisoun of Englishmen thairin, who hes schot att the burgh of Edinburgh, and staoped houses, and killed some people." For the town's defense, the city council immediately provided for an "extraordinary watch of 300 men to be on duty to serve nicht and day." Armor for the watch would be provided by a £3 assessment for every £20 of monthly income. But the

townsmen remained cautious initially. Even though the "Governor of Edinburgh castle makes use of his cannon and muskets now and then and has killed various workmen," the town did not want to overreact to the provocation of Ruthven's men "in case it offend the English Parliament." Over the ensuing weeks the Covenanters acted with more boldness as the loss of life mounted. "Those in the castle ply their cannon, muskets, and some fireworks against the town's forts and houses adjacent," and while "but there is no harm yet and only one man killed and some women hurt," the burgh mobilized to attack the castle. Ten cannon were carried to the town's batteries while "expert workmen busy day and night making worke under the ground" to create fortifications.

As the broader scope of affairs became apparent and the English threat in Edinburgh persisted, the council expressed by mid-April that the "necessity of their affairs growing daily more and more through the maintenance of the public danger...it is universallie thought good be all that for levying and entertaining of 500 men within the town and Leith thair should be levied the sum of £50,000." And if "the overall tax of tenth penny [was] insufficient, residents of Cannongait and Lieth both" would also be required to pay the sum. ¹⁰ Furthermore, the populace was expected to demonstrate military readiness. A weaponshowing was to be held on 16 April. ¹¹ Apparently its results were not entirely satisfactory as two weeks later it was noted by the council that "some neighbors [were] not sending mens, arms, or money." Those magistrates neglecting their duties were threatened with arrest. ¹²

By the late spring, active military operations around the castle had become sustained. The fortifications were complete to the extent that the Covenanters could safely "loose our cannon at them." In July, the effects of the Covenanters'

bombardment and the apparent waning of the garrison's strength prompted a direct attack against the castle's most vulnerable point, the "Spur." The Covenanters blew open a hole in the walls and made a "reasonable breach" while inflicting the loss of eight men and two commanders on the defending force. The English quickly repaired the damages with filled baskets of earth, but the Covenanters line of circumvallation was soon thereafter finished. The castle being fully blocked, the besiegers "played hard upon it from three very strong batteries." The Covenanters worked aggressively to stiffen the weight of the firepower at their disposal, bringing in "pieces of batrie were brought from Holland, some of which shot 36 and 24 pound ball."

Despite the privation endured by the garrison, desertions from his Scottish soldiers, and an increasing toll from scurvy, Ruthven did indeed hold out for six months, and did not surrender until 15 September 1640, three weeks after the climatic battle of Newburn. The English killed about two hundred Scottish soldiers and civilians and inflicted a fair amount of damage to the surrounding city, but little more. The sacrifices endured by the English troops had secured no advantage for their cause and had little effect on the broader course of events. The Scots had scored a marked victory. While eliminating the Royalist force in their capital they regained an important citadel, embarrassed the King, captured nearly one hundred of the enemy, and taken fifty barrels of powder and a "great quantity of ball of all sorts."

While the threat within Edinburgh had been an identifiably prominent thorn, the Covenanters faced other threats. It was important that the north be brought firmly under Covenanter control. Throughout the spring they moved forces in that direction to snuff any resistance and to impose their authority.

A major order of business was the appointment of a military commander. In March Leslie requested to assume command of the Covenanter war effort. A proposal circulated that would to designate a committee to advise and oversee the actions of the army in conjunction with the commander, and this was included. In the forthcoming campaign the committee possessed little influence on Leslie's active command, but its presence indicates how precariously political leaders viewed their control over military commanders and armies fighting at a distance. 15 Leslie agreed to terms and accepted his commission on 17 April. In most respects this commission is very similar to the one exercised the year prior. Leslie would possess wide-ranging powers as "generall of all the Scottis forces serveing for this common cause." His authority regarding the operational control of the army was complete. He had "full power and command" over all officers, "to give order and direction at all occasiones necessary to draw out to the feildes, or put in garisones such number and proportiounes of men out of any shyres or burghes, at such times and places as weill horse as foote. Leslie also enjoyed recruitment and provisioning authority by which he could "take up a list of all the number of men and armes in every shirrefdome or burgh within the kingdome" for service in the Covenanting cause. 16

The majority of Scots supported the Covenanting cause, but some did not, and this provided a military threat that Leslie and his commanders had to eliminate. Leslie acknowledged, "Those who cannot be won by fair means must be suppressed by force." And most of the forcing was to be accomplished in the heart of Scotland as the following map illustrates.



Figure 7. Map of Northern England and Southern Scotland. Source: Author. 18

Many of the leading Scottish royalists who normally resided north of the Firth of Forth had retired to England by 1640. But while there were no royalists in publicly armed confrontation with the Covenanters, there was a good deal of sullen passive resistance to

their rule, or more precisely, the demands of military necessity being demanded from the populace, particularly those who were families of means. The Covenanters therefore sought to police the royalist areas and on 5 May the Earl Marischal occupied Aberdeen. Raising money and men for the Covenanter's army were a priority. A number of royalist sympathizers were sent to Edinburgh. At the end of the month another Covenanting force arrived in strength, this one under the command of Colonel Robert Monro.

Monro's troops had been organized at Glasgow, Edinburgh, and Haddington, lowland districts that provided fertile recruiting grounds, and then brought to a general rendezvous at Musselburgh before being marched northward to Aberdeen. Monro's force arrived toward the end of May and assisted with the pacification of the burgh. The discipline imposed by the Covenanters was relatively harsh. One unfortunate fellow was put in "joigs" for three hours daily (an instrument of public punishment consisting of a hinged iron collar attached by a chain to a wall or post and locked around the offender's neck) for uttering imprecations against Covenanters.²⁰

Monro demanded express fidelity to the Covenant. Anyone not subscribing to its articles was prohibited from carrying arms for any reason, and ministers who were not loyal to the Covenant could were forbade from preaching. He insisted that his soldiers be quartered peaceably in civilian residences, required the submission of all keys to gates, warehouses, and the prison, and the turnover of all military supplies and weapons. A further demand was that twelve thousand rations of biscuit and one thousand gallons of ale and beer were to be placed in small barrels for the convenience and use of the Covenanter force. Giving evidence of the needs of his men, Monro even contracted for twelve hundred pair of shoes, no doubt at a very advantageous price.

Once rested and resupplied, Monro embarked upon a punitive sweep through Aberdeenshire and lands beyond. His force numbered between one and two thousand foot with about half of his strength remaining garrisoned at Aberdeen. Monro also counted at least two troops of horse, although it is likely that he recruited a force as large as three hundred. Castles at Drom, Strathbogie and Auchindoun were in turn seized, and on 16 July the Bishop of Moray's palace at Spynie was also taken. Recrossing the Spey River, Monro's men plundered the Marquis of Huntley's lands, taking two thousand horse and cattle and thousands of sheep. Unwilling to transport and unable to consume this plunder, Monro considered it more profitable to open a temporary market through which the animals were resold to their owners. Making war could apparently be good business as well.

In none of these instances did the Covenanters encounter much resistance. In his native Ross-shire, Monro successfully enlisted two hundred highland recruits for service in his regiment. Overall, his excursion was much more like an extended raid or foraging expedition than it was a formal military maneuver. Its off-the-cuff aspect was made manifest when some of Monro's men, dissatisfied with their division of the plunder, mutinied near Strathbogie. Monro's remedy was to kill with his sword the first mutineer he found.²⁵ This type of commotion aside, the effect desired by the Covenanters was achieved. The northern lands were subdued and would offer no grounds for the development of military resistance in the rear while Leslie conducted operations in the south with the main body of the Covenanter army. Nor would Aberdeen enjoy any respite as additional Covenanter forces continued the occupation.

Further south the Earl of Argyll was similarly active in enforcing obedience to the Covenanters. By 18 June Argyll had assembled four thousand men, and between that date and 2 August he marched through Atholl, the Braes of Mar, and Angus, Badenoch, Lochaber and Rannoch. The Covenanters were largely unopposed and moved at will without risk of injury or loss.

Mobilization of the Covenanting forces began early in the spring for each of the military operations underway. Troops and supplies were gathered from all corners of the kingdom. In early April the Earl of Perth had written to his cousin that "every division of the shire should have in readiness at Perth on 14th instant 144 men towards 432 needed from the whole shire." Their destinations were different as "300 of them [were] to go south and rest north under Colonel Monro." Concurrently underway was the "general muster of [the] whole presbytery of Dunblane at Ogilgeith, to be concluded by the tenth of the month. Other shires had received a similar message. On 9 April the Laird of Glenfalach received a note from his cousin with the information that "the shire has received orders for a levy of 900 foot and 200 horse to be taken up, in addition to regiments sent north and south." Again, their rendezvous would be at Perth, and the laird expected "the levy of fourth men to raise about 80."

It must be remembered that more than men were needed. Linlithgow was ordered to send carts. Some shires were explicitly requested, "to be ready with men and boats." Transportation were critical items ordered from others: "Each sherifdome is to furnish 16 horses: Perth, Air, Roxburgh, Stirling-12 horses, with man to attend each horse; Linlithgow to provide horses plus two carts and furniture, Edinburgh horses plus four long carts and furniture."

Throughout, the Covenanters prevailed. They overcame the many obstacles and difficulties associated with the gathering of military power, and continued to demonstrate sufficient organization and ability and to either inspire loyalty or to quell dissent from both ordinary individuals and the aristocracy. Despite the sullen resistance in some quarters, one observer noted on the eve of the Scottish advance that contributions for provisions and canvas for tents had been provided in enough quantity "which truly praised be god is more than ever was seen in any army in the world and no doubt but their charity in Edinburgh will be made memorable to after ages."

While supplies were being gathered throughout Scotland, preparations for a major confrontation with the English army continued in the Lowlands and southern reaches of the kingdom. A group of Argyle's men blockaded Dumbarton Castle although it would not surrender until 27 August. The Earl of Nitsdale's castles at Caervlaverock and Threave were also besieged by Scottish troops. The containment, if not outright possession of these fortresses lying near Dumfries had seemed less essential in 1639, but now, with the arrival of an Irish regiment in service of the King at Carlisle, the Covenanters needed to protect the western approaches to the kingdom. This meant that all of the royalist castles in the Lowlands were under attack by the Covenanters and eventually would be won. Charles would gain no advantage from his fortifications.³¹ And all the while that these events were unfolding, Leslie was preparing his main effort, to be directed against the Royalist army, from the eastern side of the border. In May a force of four hundred was stationed at Dunbar, and preparations were in progress for a concentration of the army at Duns. At Kelso a trench and fort were being constructed for the protection of the town in the event of invasion, but Leslie would not allow that

eventuality to pass. He would strike first into English Northumberland and would do so from the southern uplands.

The strategic situation confronting the Scots demanded an offensive campaign. 32
Leslie surely recognized the imperative of seizing the initiative. The king had already placed a garrison in the Edinburgh that was engaging the Covenanters. The risk that the English army, if given time, would marshal the strength to mount a direct attack in force against the Scottish capital was real. In such a situation, the Scots could defend and probably draw upon the Border tradition of battling the English invaders to gain popular support, but the time and location of the Royalist blow would be at the King's discretion. The Scots could only react. Leslie would need to keep his army together and in a fighting spirit for an indefinite period while waiting for the English army. For a people and a kingdom mounting a rebellion against the king, time was precious. Waiting indifferently could easily be interpreted as weakness or vacillation. What the Covenanters needed was a quick, decisive conclusion.

There was little doubt that a Scottish invasion would give Charles a compelling legal position regarding the Covenanters, but by the time Scottish troops were marching on English soil, the opportunity for legal maneuvering would be in the past. Whether the King or the Scots prevailed at that point could only be determined by force of arms. Thus military power would be the guarantor of the religious and political arguments underway since the mid-1630s, a venue in which the Scots had created distinct advantages by 1640.

The question confronting Leslie was how to conduct the Scottish offensive.

Several options presented themselves. One course of action for the Scottish army to move from its location in Berwickshire to the southeast, using the Cheviot to screen its

movement. By starting its approach marching due south to Coldstream and the border at the River Tweed, the English might be fooled into concentrating in the west. The Scots could then head towards Carlisle, about 110 kilometers distant. Once at Carlisle, all of English Cumbria and North Lancashire would be vulnerable. On the other hand, there were few decisive objectives in the area for the Scots to strike, and the marches involved were long. Leslie no doubt recognized as well that by moving so far westward he would be threatening an exposed region of England, but would also leave Edinburgh and the Lothians vulnerable and uncovered to English marauders. A safer course was to keep the Covenanting force between the English threat and the Scottish capital.

A southward move would pose several vexing questions for the English. Were the Scots merely conducting a feint to lull the garrison of Berwick into a false sense of security, setting the conditions for a quick raid on the garrison? If the Scots continued to the line of the River Tyne, would Newcastle be attacked from the north or west? Or perhaps the Covenanters hoped to draw English troops to Newcastle and thereby leaving Carlisle wide open to attack? Another course of action for the Scots was to concentrate in their campaign in the east. Several tempting options were available to the Scots in that direction.

From Duns, the port and city of Berwick lay only twenty kilometers distant.

Berwick would have to be watched closely in any case to prevent an English force from sallying against the Scottish rear, but the town was not large and was not sufficiently important to serve as the Covenanters main objective. Newcastle, which supplied coal to London and lay only eighty-five kilometers south of the Tweed, was a much more tempting target. If the Scots possessed Newcastle, they would almost certainly gain

significant leverage over the King. The Covenanters were not trying to conquer England, nor remove Charles from the throne. They only needed a clear victory from which to negotiate a settlement to their liking. Newcastle was also alluring because the Royalists could be expected to defend it with a significant force. Leslie could also achieve the Covenanters' objective by defeating an English army in the field. A clear victory would most likely so weaken Charles' position that he would be forced to come to terms amenable to the Scots. And even if that did not happen immediately, success in the field would lead to greater support for the Covenanters, and would still allow their army to attack Newcastle or threaten the north of England as the situation dictated. ³³ The following map presents the situation confronting the opposing sides.

The third of August was an important day. Leslie was resolved to advance. There was a meeting of the officers and then, "After prayer and reasoning, our [Covenanters] voyage to England was unanimously resolved, and the intentions of the Army read, approved, and divulged, and some sent away for intelligence and spreading of same." Leslie's first objective was Coldstream, fourteen kilometers south on the River Tweed and the English border. After a meeting of the Committee of Estates met at Dunce, the decision was agreed to march into England. A contemporary described the scene: "On Sunday last in the afternoone the army marched from Dunce to Caldstreame at the water of Tweid, where they camped on Hirsillaw where all the soldiers having put up their little tents in view of the Inglische was I confess a pleasent sight to be seen." But Leslie could not move immediately. Two days were required for the artillery and ammunition to assemble. And then on Wednesday, 19 August, "all day there was such a storm of wind and rain as the watter of the Tweed was up over the bank and bray which was no small

discouragement to all honest hearts fearing that the water might not be passed in a long time."

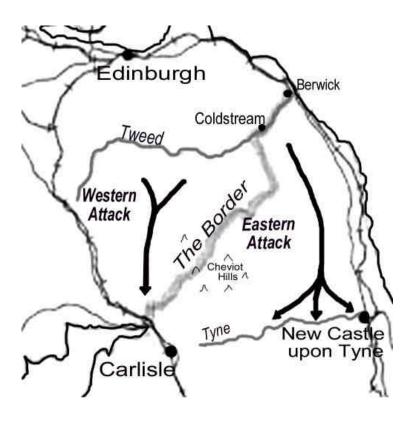


Figure 8. Scottish military options, 1640. Source: Map by Author.

But the Covenanters were not held in place for long "as it pleased god" that the water receded sufficiently "so that our army marched over on Thursday the 20th about four o'clock in the afternoon." The beacons were fired and word spread rapidly--a Scottish army was afoot in England. It was the first time England had been attacked since the Armada.

The Scots may have felt a sense of urgency since some reports provided "news that the King's forces are gathering as quickly as possible at Newcastle," and that an engagement was hence expected.³⁶ Nonetheless, the sprits of the Covenanters were high. The military commanders were out in front of their units, the "earls, lords, and commanders wading the water on foot giving thereby good example and incouragement to their soldiers," even the "cannon and ammunition went likewise over safely praised be god." Some held to the optimistic projection that "if the Scots Army passes York they are hopeful not to want friends before them," and were "confident that twelve days will put an end to the business." No doubt Leslie hoped so.

Lord General Leslie and Lieutenant General Lord Almond led their forces into England from Coldstream and Kelso respectively. The Scottish officers guided the way for their troops, "In a most resolute manner, the Earl of Montrose first waded through to give example to the rest." Leslie's Life Guard of Horse (also known as the College of Justice troop), stood upstream to slow the river's current for the infantry. (Despite their assistance, two foot soldiers drowned.) The presence of Highland archers belied the well-armed appearance of a seventeenth-century army of musketeers, pikemen, lancers, medium cavalry, and artillery. The Covenanters had fielded, armed, and trained a force that would have capably fought on the battlefields of continental Europe.

The highly motivated Covenanters, bent on forcing the king to come to terms, entered the lands of the 'auld enemie' with a significant force. Accounts of the exact size of the Covenanting army vary in their specifics, but agree that the Scottish host was a force of substantial strength of at least twenty thousand foot deployed into twenty-five

regiments (about 200 companies), and four thousand horsemen in four regiments and two separate troops.³⁹

The army crossed the Tweed at three points. Montrose himself was the first to cross at the head of his regiment at Cornhill, and units also crossed at Carham and Wark. Two days later the train of artillery composed of eleven demi-culverns (eleven and three-quarter or nine pounders), fifty-four field pieces (three or four-pounders), and eighty frames crossed the border.⁴⁰

Even as the Scots prepared and then embarked upon a field campaign, the English had been casting about for a military response to meet the emerging Scottish threat.⁴¹

Leading the royalists were new commanders. Arundel, Essex, and Holland; the commanders in the recent campaign had been replaced. The Earl of Northumberland, Lord Conway, and Sir John Conyers were the key military leaders in the north of England.⁴² Unfortunately for the English, the change in personalities provided little benefit. The Royalist commanders, beset with indecision, utterly failed to adopt any strategic plan to thwart the Scots.

At Newcastle, the English had made only halfhearted efforts to fully prepare the town for a siege. The south side, where the high road from York entered the town across the river from Gateshead, was entirely left unprotected. For months, Conway and his subordinate commanders in Berwick had refused to believe the Covenanters would mount more than supply raids into England. Their troop dispositions, approved by the king and Strafford, left most of northern England completely exposed.

Conway had arrived in Newcastle on 22 April, but had acted with little energy.

The town did possess some defenses as the following contemporary illustrations reveals.

Conway saw little need for urgency. "I find this place without any great apprehension from the Scots, and by what I can learn of the Forces which the Scots have in readiness, they nave nor reason to be afraid." Conway went so far as to attest to the willingness of the inhabitants to undertake measures for their own protection: "The town is very willing to do anything which shall be thought fit for its defence, and makes no difficulty of pulling down houses or plaining of any walls or ditches," provided of course, "the expense be not over great." He had heard that the townsmen had already expended £1500 last year, a not inconsiderable sum. ⁴⁴ These mistaken sentiments would soon cost England dearly.

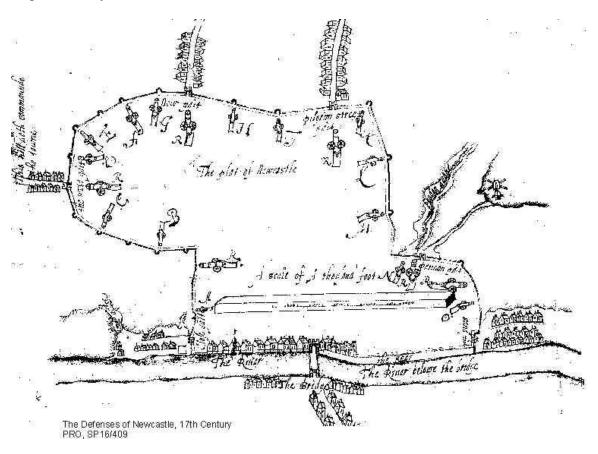


Figure 9. The defenses of Newcastle. Source: PRO, SP16/409.

Compounding the challenges confronting the English were concerns about the quality of their troops. Troubles appeared as early as the spring when on 26 April a body of troops arrived from Berwick to be discharged. Upon their arrival they mutinied and demanded payment for five days conduct-money and two days' pay. To make their point some of the men lighted their matches "as if they meant to do somewhat." Conway responded with sternness by apprehending two of the mutineers to conclude the episode. This kind of affair was certainly not unknown, but was not a welcome harbinger. 45

Whereas the Covenanters either successfully enlisted the support of the Scottish countryside, or when necessary, forcefully subdued resistance, local resistance hindered the English war effort. The king needed the support of Yorkshire and its trained bands of thirteen thousand men. But the gentry were not happy. ⁴⁶ In early April the county's deputy lieutenants refused to levy two hundred men and send them to Berwick without the payment of coat and conduct money in advance. On 4 April it had marched six of its trained band regiments towards Newcastle before the order was rescinded and the county was left with six thousand unpaid troops to accommodate. This kind of friction between the county and London continued over the course of the summer.

Despite the fact that the Covenanters were actively campaigning in the north of Scotland, contesting the occupation of the castle in Edinburgh, and assembling an army north of the border, English leaders avoided decisive action. Conway seemed to vacillate between wanting to prepare and placing the responsibility to do so on just about anyone but himself. On 8 June he told Windebank that the Scots were said to contemplate an attack upon Newcastle, and that the rumor had "put this place into a great fright, so that

they now begin to think what is best for their defense."⁴⁷ His comment here hints that somehow the residents of the town were the ones hindering English military activities.

On 10 August he again cast blame for Newcastle's unpreparedness: "I see no help for this town but that it will be lost. I have written divers times that it might be made defensible, but that was not thought fit; now it is impossible to resist if cannon be brought before it." And he still acted as if he were dependent upon the townspeople's support: "I will see if I can persuade the town to make some defense, if it be possible to keep it a day or two." In any case he concluded, his orders were virtually impossible to fulfill: "The King commanded me to burn the suburbs, [but] burning them will not be of any use, the houses are all of stone, so that the walls will be of as much annoyance to the town as if the houses were untouched. If I leave any number of men in the town their arms will help to arm the Scots; and they are in great danger to fall into their power. If I quit the town and leave no soldiers, I am sure it will be imputed to me as a dishonorable thing." Plaintively he went on to argue that "when an enemy is master of the field, that ought to be quit to him which cannot be kept, and in such manner as he shall receive least benefit by it." His only resolution was to "immediately give order that all ships go out of the river, and those that cannot to be burned or sunk; they say that there is a means to sink them so that they may be again recovered." 48 Overall, Conway presented a dismal summary of four months' opportunity to prepare a military campaign that showed no signs of change even as the Covenanters initiated cross-border movements.⁴⁹ Meanwhile, time was running out for the English commanders. The Scots were moving.

While Leslie maneuvered the main army southward, Conyer's English forces in Berwick attacked Covenanter forces in the region three times. On 23 August, Lord

Wentworth, with eighty horsemen, surprised a Scottish cavalry detachment near Wooler. The English captured three small cannon, but lost them on the way back to Berwick when the Scots regrouped and counterattacked. Two days later Sir William Brouncher led 120 cavalry and 120 musketeers against Covenanter troops in the vicinity of Coldstream. Each side lost one man, and the English retained the field, but again, the English achieved nothing of import. On 29 August, 160 Royalist troops turned away a Scottish attack against a body of English artillery in the vicinity of Duns. Major General Thomas, 2d earl of Haddington led a relieving force of soldiers. Overall, the fortress at Berwick failed to turn Leslie from his strategy or to inflict any losses that mattered to the Scottish war effort.

Leslie demonstrated sound tactical judgment throughout his march southward. There are indications his cavalry covered the vulnerable left (eastern) flank during the advance. The ground there allowed for more fluid movement of forces. He also avoided a route that too closely neared the coast as the English possessed a clear naval superiority and the Scots could not easily respond to an English landing. Leslie did not wish to give the English the opportunity to trap his forces along the shore and thus be able to pound them with artillery from warships, nor to rapidly move troops behind Scottish forces. Thus Leslie remained within striking distance of the coastal communities to keep the English focused on defensive works, but far enough away that he could rapidly move even further inland upon the sighting of an English fleet.

The Scots also advanced on a front that did not reveal their ultimate destination, and which provided sufficient flexibility to consolidate the army in the face of English opposition when that threat ultimately materialized, as Leslie knew it must. Eventually,

the Scots would have to fight, and Leslie recognized this. In fact, that is why he had invaded--to fight on English soil, on Scottish terms. If the fight were inevitable, as the political situation dictated that it must be, then it was best to seize the initiative and to gain that fight on Scottish terms.

On the twentieth-sixth the Covenanters approached within seven miles of Newcastle, halting at Eachwick and Ponteland (northwest of Newcastle). Next day Leslie's men moved south to Heddon, Throckley, and the ford at Newburn along the Tyne. Reports in London indicated that the Scottish army, numbered 32,000 combatants as it approached Newcastle.⁵² Conway had made one bleak attempt to block the Scots southward thrust before it reached the city.

When he learned that the Leslie had crossed the Tweed, Conway led a detachment of his cavalry out of Newcastle. On 22 August he approached Felton, where a bridge spanning the River Coquet might be held by a small force to halt the Scots, at least temporarily. But Conway quickly took the counsel of his fears and determined that the Covenanters would "eat and fight devilishly," and he wanted no part of such a contest. 53 He consoled himself with the thought that "Newcastle will be defended as long as it, is possible, and in my opinion it will be best that the horse be about Hexham, the passages over the Tyne ought also to be defended, but there goes more to it than to bid it be done. If the Scots can be stopped at the Tyne it will be a great work." 54 So Conway withdrew from Morpeth upon Newcastle. Leslie crossed the undefended Coquet to the west of Felton, and encamped at Netherwitton. 55 Conway was once again despondent. "At Newburn," he wrote to Vane at York, "is a regiment to defend it, but what is that? There are more than eight or ten places where the Scots may pass. If you do not take good heed

they will be with you. If they have a mind to take Newcastle, should they come to Gateside they may do it very quickly, for there are no works made on that side the river, neither could there be for want of time, but I believe they will not come hither."

Conway was illogically sanguine to the last.

From a strategic perspective, the Scots had performed exceedingly well by organizing and positioning an army at Duns and Coldstream. Throughout the spring and summer, the Scots retained several options. The key was to continue their preparation for an offensive into England. This meant that the English faced a persistent quandary because the Scots had seized the initiative. English defensive preparations could only be reactive in nature. Choosing a line of defense was problematic. Now, through a brilliant operational movement from the border to the line of the Tyne, Leslie had maintained his advantages.

As dismally as the Conway, Conyers and the English leadership performed in the face of the Scottish advance they did possess alternatives. Leslie and the Scots had been indeed superb, but their superior concept of operations and maneuver did not guarantee them a permanent position of advantage. The English should have moved more aggressively. For instance, when Conway, with one thousand cavalry advanced to the town of Morpeth (fourteen miles north of Newcastle), he should have offered resistance at the river crossing there. For that matter, Leslie's men crossed nine rivers during their advance from the border to Newcastle. At any of these, Conway might have offered a defense. He certainly lacked the men to establish a deliberate defensive position, but he could have conducted a demonstration that required the Covenanters to reconnoiter the English position and deploy to do battle. At that point the English could have withdrawn

to the next obstacle to repeat the exercise. Given their paucity of men and materiel, it was certain that the English would lose territory. Time remained their ally, and the longer the Scots could be delayed north of Newcastle, the better the English chance for a favorable outcome.

Another possible course of action for the English was to establish strong points and flanking parties to harass the Scots lines of communications throughout their march southward. This would have cost Conway the loss of most of the troops he committed in such a manner, but again, he would have most likely slowed Leslie and gained time for the Royalists to muster a sizeable army near Newcastle. For example on 22 August, while the Scots were at Milfield Moor, Conway was with his cavalry Felton, only forty-five kilometers distant. He could have been in contact with the Scots the following day. Instead, he fled back to Newcastle. Throughout the initial portion of the campaign Conway never allowed his men to advance closer than twenty-five kilometers to the Covenanters. Only the troops from Berwick engaged the Scots. This seems to be the option favored by Charles when on 14 August he directed Conway:

Immediately upon view of the hills that command the town towards Scotland, and any other hill or; place whence the town may be battered by the enemy, you erect redoubts and draw lines and trenches from one redoubt to another, and put sufficient men into these fortifications for their defense. If you are not furnished with ready money for such a work, you shall cause such inhabitants of the town as you think fit, seeing their own safety is so much concerned therein, to labor in these fortifications and hasten the perfecting of them, for which his Majesty promises they shall receive fitting satisfaction. ⁵⁸

A final possibility for the English would have been to consolidate all forces at Newcastle and the line of the River Tyne. With sufficient manpower, strong defensive works could have been thrown up to canalize the Scots and force them to attack these English positions because their survival in the Scots' rear would have been too

dangerous. Hence the Scots would have been forced to attack at the time and place of the English choosing. There was never any doubt that it was southward the Scots were marching, and eventually they would have to cross the line of the Tyne. Once the Scots moved across the border at Coldstream, they were committed to the eastern side of the Cheviot Hills. The English, even without direct knowledge of where Leslie intended to strike, might have regained the initiative by offering to fight the Scots wanted from prepared positions.⁵⁹ As it happened, Leslie was left to maneuver virtually without opposition even though the English considered this option. Astley wrote to Conway from York on 13 August to suggest that course. "If," he urged, "you cause the Durham regiment, with their troop of horse and some of your horse, to be ready to march to the Tyneside to guard the river betwixt Hexham and Newcastle, I believe the Scots will never be able to pass that river, and this army coming towards you will certainly secure all things, for I shall be with you upon the first summons very speedily."60 As has been seen, Conway's despair terminated this idea, and the main body of the English army was nowhere near Newburn.

Charles himself did not depart London until 20 August. He had announced his intention to lead the war effort from the forward position at York but some of his advisors, Strafford included, warned of the dangers. In Strafford's blinkered judgment, Newcastle would at once be secure when Astley joined forces with Conway. And all at court were acutely aware of the difficulties that had been faced with the Yorkshire gentry. The local bands may prove to be as much of a threat as the Scots. But Charles insisted and departed London for York. Prior to his journey he his issued a proclamation that

condemned the Covenanters for their assembly of armed force, and called to the several counties in the north to mobilize their trained bands to repel any invasion.⁶²

Unfortunately, the host that Charles sought to assemble failed to materialize.

Between the tenth and twenty-third of August the King's army in Yorkshire made scant progress from Selby to York, covering merely fifteen miles during the period. Charles reached his troops at last on the twenty-third and initially decided to assume a defensive posture along the River Tees, but then changed his decision and initiated movement towards Newcastle. On the twentieth, as Lieutenant General Strafford reached York, Charles marched north with his ill-equipped forces for Northallerton, yet seventy kilometers from Newcastle. 63

Thus when the Scots proudly planted their foot colors and waited for their cannon and ammunition to appear that same day, they were poised to continue their attack. The Tyne River leisurely wound its way through the Northumberland hills in the near distance. Their standards, emblazoned with the motto "Covenant For Religion, Crown and Country," neatly summarized Scottish aspirations. A short distance to the east the English belatedly confronted their predicament. In haste they attempted a number of tactical redeployments to rectify a summer's worth of inadequate and ill-conceived preparation.

"I have almost surrounded the town with works already," Astley wrote to Conway regarding Newcastle--generously failing to point out of course, that it had largely been Conway's omissions that left the defenses of the town in such a shameful position to begin with. Astley rightly, albeit quite tardily, intended to encompass the entire city with lines, "from one to the other." Then, he instructed Conway, "If the Scots cause you to

retreat on us, we will leave the town for your horse, and draw into the works."64 As an afterthought he optimistically added that within twelve hours, his progress on the defenses would be so far underway that he could afford to send two thousand men "to cast up entrenchments against the fords." The fords were the key to the upcoming action and he correctly identified the threat to his position posed by the critical "ford at Newburn, four miles about this town." But his immediate tactical dilemma, the one that most perplexed the English commanders, lay in the unfortunate fact that there were "eight fords in all to Hexham." The Scots held a central position and retained the initiative since the English could not cover each of the crossing sites. With no organized threat to their rear or western flanks, Leslie could move his force in nearly any direction. Thus the line of the Tyne was more ephemeral than real. Its path lay before the Scots barring their progress like a wall, but this wall possessed too many doors for the English commanders to secure. Astley may or may not have understood fully his predicament, but he nonetheless promised that, "if the Scots leave us and pass that way, I shall be able to send succour that way."65

In the event, such plans and assurances were shallow assertions. The English could not position their troops to guard against each of these fords at this late hour. And more importantly, the English chain of command continued to react tardily to Scottish movements. It was almost as if Leslie's invasion had been a physical blow to the collective psyche of the English officers. Stunned, they milled about and waited.

But while it is not surprising that Leslie's splendid maneuvering of the Scots army rendered the English commanders struck to a state of acute indecision for the moment, the English could still retrieve the situation through battle. 66 Leslie had gone far to the

attainment of a victory but the upcoming fight would determine the outcome of the campaign. He had pursued an indirect approach to the fullest extent possible in 1640. The past week's moves served the purpose of posturing his force for the decisive battle that was the necessary conclusion of the campaign. This fact alone gave the English commanders an advantage had they chosen to wield it. They should have concluded as did Leslie that ultimately the Scots would seek battle because they needed a conclusive military finale if they hoped to achieve a political settlement with Charles. While Leslie was well aware that he could not advance indefinitely into England the English seemed unsure of this fact. His mere approach to Newcastle had so upset them that they had completely surrendered the initiative to the Scots. They should have retained the knowledge that the only means to defeat and to deny Charles of political power was to defeat his army. As long as an English army kept to the field, the English cause lived. This shared identity between army and state was just emerging in early modern Europe, and none of the English generals appreciated its implications. Rather they adhered to the limited options that terrain objectives dictate to military commanders. However there were distinct tactical opportunities on the English side.

Since Newcastle was fortified on its northern side, and virtually defenseless on the south, a siege of the southern approach to the town seemed almost certain to the English. But to execute such a flanking maneuver, the Scots would have to ford the Tyne, a tidal river. Conway suspected that Leslie would traverse the bridge at Hexham, about thirty kilometers to the west of Newcastle. His overall plan, if he possessed one, is not known, but the disposition of English troops indicates that Conway's intent was for the English troops to deploy in two divisions, one at Newcastle and one at Hexham. The

intervening ground could be patrolled, and a sizeable force held in readiness in case the Scots crossed anywhere between the two towns.

Strident instructions from London suddenly inspired Conway to undertake such measures as were possible given the lateness of the hour to defend the passage of the river and to prepare to meet the Scots. On 26 August he had sent a message to Charles requesting instructions. Stratford's emphatic reply clearly outlined Conway's mission and purpose. "Your Lordship," he wrote, "will admit me to deal plainly with you. I find all within this Place extream ill satisfied with the guiding of our Horse, and publish it infinitely to your Disadvantage, that having with you a thousand Horse and five hundred Foot, you should suffer an Enemy to march so long a Way without one Skirmish, nay without once looking on him. I shall advise, that you, with all the Horse, and at least eight thousand Foot, and all the Cannon you have, march opposite unto them on this Side the River, and be sure, whatever follow, to fight with them upon their Passage. Indeed you look ill about you if you secure not the River Dear my Lord, take the Advice of the best Men, and do something worthy yourself." 67

Stratford penned this guidance under the impression, which Conway himself had conveyed, that the Scots were marching towards Hexham. That ford was the easiest to navigate and would allow the Scots to most rapidly continue their march southward.

The English predicament became suddenly much more complex and fraught with peril when the Scots appeared before Newburn. If Leslie had advanced his main body upon Hexham, the garrison at Newcastle could have resisted whatever token force the Scots dispatched to watch it. Given that Newcastle was at least partially fortified, and that the town would be difficult for the Scots to bypass entirely given its strategic and

economic importance, only a relatively small force needed to remain within its walls while a larger force sallied forth to defeat the Scots. 68 English commanders no doubt assumed as well that the main body of the English army, when it moved up from Yorkshire, would first appear at Newcastle. The English army could then have been held to pounce on the Scottish invaders once they turned to invest Newcastle, or deployed against the Scots as they exposed a flank by continuing further inland. But what Conway and his advisors anticipated never occurred. Unfortunately for the English Leslie did not comply with the English preparations. Instead he chose the ford at Newburn, a position from which he could threaten Newcastle and points south alike. A considerable portion of the Scottish army was, in fact, detached towards the town. Or at least in position to move in that direction on short notice, thereby insuring that in nothing, therefore, could Conway obey orders, for the infantry and the guns that Stratford recommended be deployed were required to defend Newcastle.

Leslie's perspective choice of wading across the Tyne near Newburn, six miles from Newcastle, was trenchant because by doing so he unhinged the English dispositions. The English had waited too long to select their own course, and now were caught with essentially no plan at all. Besides, Conway's forces had been able, at least to a certain extent, "to make the country desolate as far as Newcastle." Leslie could use the stores and shelter provided by Newcastle to replenish his own. In any case it was time to attack because the opposing armies were running out of maneuver space. The fight was imminent.

On the twenty-sixth, the Scots had dispatched a drummer to Newcastle bearing two letters, one from Leslie as the commanding general, and one from the Committee

with the Army. One letter was addressed to the mayor of the city, and one to the Governor. The Scots requested free passage, a request Conway curtly dismissed, as was custom. "We work day and night, and all the colonels remain on the spot," he haughtily boasted. True enough, but the English were in a difficult, if not irretrievable predicament.

Throughout the evening of the twenty-seventh the Scots determinedly arranged their artillery in the forests along the ridge above Newburn, and within the buildings of the town. The Scots effectively used the cover of darkness to mask their dispositions and emplace their batteries without revealing their position to the enemy. The Scots even placed a cannon within the tower of the old Norman church: "Upon the steeple of Newburn Church some of his Swedish cannon were placed to moraine the English entrenchments upon the opposite bank." ⁷¹

Leslie's force outmatched the English both in terms of caliber and quantity of guns, an important attribute. The Scots' largest cannons were demi-culverins throwing a 10 ¾-pound ball, while the largest the English could muster were a mere eight guns firing at best being sakers that fired six pound shot. All told, the Scots fielded at least five times as many pieces as the English, and perhaps as much as ten times the number. That they were able to do so successfully was again due to their collective experience gained on the continent, this time with reference to a technique for the manufacture of small-caliber temporary cannon. Some of the Scots' cannons were crafted of iron tinned and "done about with leather, and chorded so that they could serve for two or three discharges. These were light, and were carried on horses." Although capable of firing

only a few rounds before bursting, they could still help to give the enemy a misleading impression of the extent of one's firepower.⁷⁴

Conway should have known of the Scots' strength in artillery. Conyers had written to him on the 21st, informing him, "Leslie was said to have ten half-culverins, six drakes, and nearly thirty of 'Sandy Hamilton's little guns.'" A second letter on the 24th revealed that the Scots "have 11 pieces of cannon, 54 fieldpieces, little drakes, and 80 'frams.'" Yet the English made no special effort to identify or to hinder Leslie's artillery emplacements at Newburn. There was simply very little that the English could do since the bulk of their own guns were absent.

Yet, superiority of Covenanter artillery aside, guiding Leslie's actions at this point--and the corresponding English response--was the fact that once across the Tyne, the Scots would have to move swiftly to the unfortified, south side of Newcastle to seize the city. So the English still retained a modicum of opportunity if they chose to avail themselves of it, because the Scottish plan of attack could most certainly be divined, at least in its broad forms. And the Scots did nothing to conceal their presence on the heights above Newburn, as their campfires lit the night along the high ridge extending along the northern shore of the river, only a kilometer from the water's edge. To protect the Scots' main army, which Leslie intended to throw across the river, he ordered a portion of his forces to march east to a position outside the walls of Newcastle. Thereby he could guard his left flank and force the garrison within to be watchful for a sudden assault of the type which had successfully captured Edinburgh Castle in 1639.

While the soldiers completed their final nighttime movements, Leslie undertook a leaders' reconnaissance to survey the situation. Accompanied by an escort and by his

senior officers, the Scots moved along the valley of the Tyne. They encountered a troop of English cavalry in the darkness on the north side of the river, and a brief standoff ensued until supporting Scottish horse arrived. The English horsemen hurriedly withdrew. Thus, the English had probably just lost their best chance to win the fight that was about to occur at Newburn. A spirited attack, although rarely conducted at night, by Conway's troopers may have disrupted the Scots' preparations. That the English could range on the north side of the river indicates that the Scots were not yet guarding the crossing site in any strength.

Yet Conway remained hesitant. He feared leaving the town uncovered in case the Scots again stole a march on him, so he divided his forces. Leaving Newcastle heavily garrisoned with seven thousand foot and five hundred horse, Conway moved west opposite the village of Newburn with three thousand foot, two thousand horse, and his eight cannon. The division of the English army in to two forces of over ten thousand men greatly simplified Leslie's mission. To hold both the Tyne crossing and Newcastle, Conway had no choice but to split his already outnumbered group. However, the body sent to meet Leslie at the Newburn ford should have been much larger. In 1644, Newcastle was garrisoned by 1,700 militia and volunteers, and it had held out for three months. Conway could have left more than twice the number in the city and still brought at least three thousand more infantry to hold the Tyne. Instead, he in effect neutralized one-half of his army by penning them inside Newcastle.

The brilliance of Leslie's strategy at this point became evident. In effect, Leslie had taken apart the English strategy by the simple act of wading across the Tyne near Newburn, only six miles from Newcastle. Conway over committed to a Scottish crossing

at Hexham by dispersing his forces too widely. By crossing between the main fording sites at Newcastle and Hexham, instead of directly across from either, Leslie struck at the weakest part of Conway's plan; in any case, the plan appeared more a concept than a genuine deployment. Now Conway was in a dire position. Too spread out to concentrate his forces, too weak to repel the invading Scots, and unwilling to surrender the Tyne line and Newcastle, Conway could only hope for a stout defense of the ford site at Newburn to bloody and stall the Scots until his own reinforcements could arrive. There was nothing to do now but wait for the morrow and the decisive struggle for the future of Covenant, Crown and Country.

Throughout the forenoon of the 28th the two armies faced one another, neither seemingly anxious to make the first move, "without affronting one another or giving any reproachful language." The tide was running too deeply to allow passage, so each side waited and watered their horses on their respective sides of the river. Sometime in the early afternoon, the Scots moved "four pieces of ordinance...to a little hill on the north side of the river over against the English workes." The English continued to "cast up" trenches "to stop the passage" at the ford. They also drew up eleven troops of horse in sight of the Scots a bit east of the ford where the cavalry remained until two p.m.. The Scots knew that low tide was due between two and three p.m., so the Covenanters deliberately mustered for a battle, then waited. What happened to open the ensuing battle remains a point of historical dispute.

The traditional account from the English perspective maintains that early in the afternoon Leslie sent a trumpeter to Conway to assure him that the Scots desired only to petition the King, and that they therefore be allowed to pass. Conway replied of course

that it was impossible for him to grant passage to an entire hostile army, but that a small delegation was welcome to cross the river. While this charade was underway, a messenger arrived for Conway bearing dispatches from York. While the English officers were reading the missives, an incident triggered the battle. John Rushworth, who had arrived at Stella Haugh only an hour or two before, recorded the event:

A Scottish Officer well mounted, having a black Feather in his Hat, came out one of the thatcht houses in Newburne and watered his Horse in the River Tyne, as they had done all that day. An English soldier, perceiving, he fixed his Eye towards the English Trenches on the South-side of the River, fired at him (whether in earnest or to fright him is not known), but wounded the Scotish man with the shot, who fell off his Horse, whereupon the Scotish Musqueteers immediately fired upon the English, and so the fight begun with Small-shot, but was continued with great Shot as well as small.⁸²

To the English, this spectacle of an officer seemingly reconnoitering their positions was enough to turn agitation into action. Soon after the hapless Scot tumbled into the river. Leslie called on a body of three hundred horse to take advantage of the low tide and to charge the English works. The battle was engaged.⁸³

However, the Committee with the Army reported to Edinburgh a slightly different scenario for the battle's opening stages. In this account, the English "had four pieces of ordnance which did begin and play upon our people who came near the water side." This would have occurred from about one o'clock to four o'clock p.m. Apparently the fire had little effect on the Scots. Further, the English "musketeers shot upon our soldiers about three hours" before the Scots "did shoote one shot at them." The Scots soon replied however, by unmasking their artillery, which had remained largely undetected by the English to this point. With two of Hamilton's artillery pieces "which so amazed those at the workes [English], that they fell down flat on the ground, as they had been dead." Here the two accounts merge, for they agree that a heated artillery duel ensued.

The Committee's report graphically described the action: "After this, some of our grate ordinance, and some of our fielding pieces which we planted in convenient places about, did discharge upon the footmen that were in the workes, and having killed about twenty of them, did so affright them, that all the footmen fled confusedly; the horsemen coming to second them, were so beatin with the grate ordnance, that a gate many of them were made to flee."

The precise numbers of troops engaged at this point is difficult to determine. Conway probably had in position about three thousand infantry and fifteen hundred horsemen. Most of the latter he held in reserve to the east near Stella Haugh. There they were away from the danger of Scottish cannon that probably outnumbered the English guns by an order of two or three to one. Conway fielded around ten guns, the largest being sakers that fired a 10 ¾-pound shot. The remainder of the English artillery train was scattered, much of it remaining in Newcastle, left there in Conway's haste to oppose Leslie at Newburn Ford.

Soon the larger of the two English works had been damaged and the men began to waver. The Scottish cannon had been well positioned in and among the woods and buildings of the town. It was difficult for the English troops to identify their camouflaged enemies. Scottish snipers interspersed themselves along the heights as well in the "church, houses, lanes, and hedges," aggravating the predicament of the men in the English works.⁸⁶

As hot as his guns were making it for the English guarding the ford within their works, Leslie knew that he needed to get horse and foot across the water to defeat the main body of his enemy.⁸⁷ Only with the Tyne receded could he cross a sizeable force

and the longer he waited at the water's edge the higher the risk to his army. Three hundred Covenanter cavalry attempted a crossing that triggered a sharp volley from the defending English behind the earthworks. Leslie's intent with this action was probably to change the dynamics of the combat to his advantage. It was reasonable on his part to conclude that the advance of the cavalry might force a retreat from the sconces, the eight hundred English musketeers being isolated and not too well disciplined, or a withdrawal of the Scottish horse back across the river might lure the English cavalry to prematurely counterattack. In that case the Covenanters advantage in artillery would come into play and it would be the English who faced the difficult prospect of exposing themselves as they crossed the river. In the event, neither course of action transpired as the English soldiers sheltering behind their modest bulwark held fast to their positions and unleashed a barrage of gunfire that brought short the Scottish attack. The Covenanter horse "wer so galled by the English musketeers from behynde the breest worke, that they wer forced to reteer."88 Having failed to dislodge the entrenched troops or lure the English horse to the fight, Leslie continued to harry the sconces with intense cannon-fire, and waited. Fortunately for the Scots, they did not have to wait long. The ferocity of their cannonade soon compelled the foot soldiers to evacuate their trenches: "About 4 o'clocke in the afternoone, after some fewe muskettes shotte, the Scottes mounted some ordinance on the steeple of the church of that vyllage, which comaunded our workes and battered them so muche that they that weare in one of them fled And for-sooke the work: the other stayed makynge a lyttle resistance, but not long After lykewyse fled."89

Only with great insistence had the English officers been able to keep their men at their posts as long as they had. The front wall, consisting of only "a trench halfe a yard high," offered scant protection. When a shot soon thereafter fell directly into the work, killing several of the officers, it took every energy from the commander of the work, Lieutenant Colonel Thomas Lunsford, to inspire the men to continue fighting. 90

Lunsford enjoyed something of a nefarious reputation as a brawler, and he had earlier admitted that he and his officers had slain some of their own men in an altercation. But even fear of their leader was not enough to keep the English troops in position much longer. Already tired and in ill humor from spending the night in the exposed position without relief, the English troops in the work considered the Scottish fires to be the greater of the two evils facing them. The impression that they were being held in place to be sacrificed while their main body waited in safety was no doubt overpowering. When a second shot struck home, discipline within the position crumbled: "Some of our [Scots] grate ordinance and some of our feilding pieces which we planted in conuenient places aboute, did discharge upone the foottemen that wer in the workes, and having killed about 20 of them, did so affright them, that all the foottmen fled confusedly." "91"

The fear of being blown apart by the cascading Scottish shot or of being subsequently rundown by the now-advancing Covenanters overwhelmed the trepidation the Englishmen felt towards Lunsford, and the Somerset infantry, reduced in strength from their original roll of eight hundred men, began to flee towards the safety of the rear. ⁹² In moments the men were consumed with panic, and threw down their arms as they fled although a few brave souls managed to blow up the powder in the work before retiring. A Scot who observed the action marveled that the Covenanter guns had "a perfyt view of the English trenches" and "did play so hard upon them, that they were forced to throw away there armes, disband in confusion, and blow up there owne pulder." ⁹³

With the English entrenchment compromised, the ford appeared open to a direct assault. Leslie placed a battery of nine cannon near the water's edge to provide direct support. Next he sent up a detachment of cavalry to test the passage. As seen in the following map, the fight was concentrated and vicious. The Scots needed a permanent foothold on the far side before the main body could attack. Initially the English troops in the area offered little resistance and the small party of Scottish horsemen crossed the river without undue difficulty. Seeing their success, Leslie felt amply confident to send ahead the main body of his footmen. ⁹⁴

Ordered to the assault, the Scottish troopers were "so animated" by the evacuation of the English "that horse and foote with all possible haste went over the water, and took them all prisoners that stayed in the trenches." While elements of both Scottish infantry and horse were mopping up at the first sconce, Leslie ordered a small body of the College of Justice regiment to advance further. His objective this time was the second of the English defensive positions.

As these men began their movement, one hundred sixty cavalry of Leslie's Life Guard of Horse, under Sir Thomas Hope of Kerse, also plunged into the river. Initially they reached the south bank without suffering loss. However, a heavy concentration of musket fire from gathering English troops who had regained a measure of composure repulsed the mounted Scots. Apparently the loss of the one entrenchment and retreat of its occupants at waterside had not fully deterred the English foot.

Battle of Newburn, 1640

- Scottish artillery Fire and English return fire.
- 2. Scottish assault and English resistance among the works
- Scottish lodgement and English counterattack with cavalry.
- 4. English last defense along the ridge
- 5. English retreat and Scottish pursuit

Blue: Scottish formations and movements Red: English formations and movements

Figure 10. Newburn Battle, 1640. Source: Map based on Ordnance military survey.

Still occupying the secondary works and in formations along the sloping higher ground south of the river, the English army continued to fight. Seeking yet to win the day, Conway's cavalry, which had so far remained out of gun-shot at Stella Haugh, recklessly joined the fray with a rush.

Under the leadership of their commander, Commissary General of the Horse

Henry Wilmot, a veteran of Dutch service who would later earn fame during the Civil

War, the mounted arm undertook a frantic dash to retake the lost cannons and arms that
the infantry had recently abandoned. Wilmot galloped directly into the Scottish forces,
and killed two or three men "with his own hands after he had received a pistol shot in his
face; he charged them alone where his troops was left engaged." Inspired by Wilmot's
example, fellow cavalrymen, Sir George Vane, Sir John Digby, Captain Daniel O'Neill,
and perhaps Sir John Suckling, also threw themselves into the fray. Vane's horse was
wounded under him, and his company suffered numerous casualties. The English
infantry, still dazed from their punishment by the Scottish guns, were particularly hesitant
to hurl themselves back into the fracas. An opportunity existed for the English to exploit,
but as an English account related, "Our commander of horse charged them bravely, but
there troops for the most part ran away Had our men followed there leaders and not

fled, the[y h]ad gotten the honor of the victory." After this short, sharp exchange of charge and counter, the Scots had suffered enough and retired nearer the water's edge to consolidate and reorganize. There they waited for reinforcements under the watchful cover of the Scottish batteries.

While this fight was ongoing in and around the western work, Leslie had repositioned another section of guns to batter the eastern work. The fire from these guns and the pressure applied by Kerse's troopers was so heavy that the English were soon compelled to retire from this work as well. In effect, it was the overwhelming strength of the Scottish artillery that allowed the Scots to gain their footholds across the ford. Their artillery created tactical opportunities that the cavalry, and then the infantry, in turn sought to exploit. But while artillery could turn the tide of the fighting, it could not win the battle. Leslie needed his infantry forward to hold the ground the English had initially yielded and were now counterattacking to regain.

A large contingent of Scottish footmen from Lord Loudoun's and the Earl of Lindsay's Foot, about 2,600 men, crossed the river to try to seize the southern embankment and blunt the resurgent English. But even this sizeable force was not enough to stem the tide. They too were stopped in their tracks by the sudden appearance of six troops of English horse (three to five hundred men) who charged and drove back the Scottish infantry. That a smaller mounted force could halt the attack of an infantry formation five times its strength is a testament to the power of shock effect a properly led cavalry unit could inflict upon an enemy. But while halting the advancing Scottish infantry for the moment provided a temporary victory; defeating the foot soldiers was

another matter. For that to happen, the English infantry needed to appear in force on the southern shore.

Leslie recognized that at this moment the outcome of the battle hung in the balance. Although beaten back from the river's edge, the English were still a credible force. Their cavalry had not been defeated, and portions of their infantry were rallying. Hamilton's well-placed artillery fire and sustained volleys by Scottish musketeers continued to pressure the English but they were not moving. To the Scots' advantage, they had seized both covering entrenchments protecting the passage across the river and Leslie enjoyed a local superiority of numbers. As an experienced battlefield commander, Leslie no doubt clearly perceived that the decisive moment had arrived. The outcome of the battle hung in the offing, waiting for the best commander to seize the moment to his advantage. The hour was growing late. If victory for Scottish arms was to come that day, it needed to happen quickly. So Leslie ordered a general advance.

Spearheading the attack were fifteen hundred men from the Fife and College of Justice regiments under Colonel Leslie and Sir Thomas Hope. Loudon's and Lindsay's infantry, having reformed, once more moved ahead to retake the lost breastworks. ⁹⁹ The Scots needed to retain the crossing sites to finally defeat their enemy.

Knowing that if the Scots took the river passage the battle would be lost for good, Wilmot cavalry again struck back viciously, but the personal bravery demonstrated by the English leaders could not this time stem the advancing Scots. The English troops pushed their attack but the weight of the Scottish army was too much. Their ranks still reeling from the evacuation of the entrenchments, the English units lost their cohesion and could not contain the fresh Scottish formations being thrown at them.

Soon ten thousand of Leslie's men began pouring across the river. Isolated pockets of English troops continued to resist, but the main body quickly broke in a mad dash to save themselves. Wilmot wisely led his troops and as many as he could gather from sister units southward to the higher hillsides that offered some promise of safety. The onrushing Scots easily mopped up those English troops who fled along the flat ground near the river. Sir Jacob Astley tried to rally the foot in a nearby forest, and tried to reform them to support the cavalry. But despite the best efforts of many English commanders, the retreat soon became a rout. The English troops lost all sense of cohesion as the Scots on the southern embankment, sensing victory, redoubled their efforts to crush the last vestiges of English resistance near the river. Remnants of the broken English regiments straggled towards Newcastle and the safety of the town's walls. The English horse headed southward out of the area.

Led by Leslie's Life Guards, the Scots began to pursue the fleeing horse. The Scottish cavalry drove away one final group of six or seven troops (three hundred to six hundred) of English horse that had been aimlessly teeming around a hilltop. Had these men supported Wilmot's earlier counterattack, the outcome may have been different. Now they failed to offer a covering force to protect the scattered and fleeing brethren. In a desperate bid to stall the Scots, the veteran horseman Wilmot and Major Daile O'Neill led a final cavalry charge into the massed Covenanter infantry and cavalry. But Leslie and his troopers aided by the Scottish musketeers beat them off.

Conway's entire force was soon in full flight. Wilmot, marooned on the level ground between the river and the advancing Scots, was captured, as were Digby and O'Neill, among others.¹⁰⁰ To prevent later acrimony, Leslie ordered that the retreating

English troops not be slaughtered. With a portion of his own army still stranded on the north bank due to the rising tide, he must no doubt have been concerned lest Conway should return in any force. While a substantial number of horse and foot had reached the southern bank, thousands more men and all of the Scots' artillery were yet located on the north shore inside Newburn town. An immediate return of English forces was unlikely. So the Scots consolidated their gains and sent scouts to determine the location of any nearby English forces.

In the event that would not be the case. As night fell, the remaining English foot reached Newcastle with two rescued guns. The cavalry finished their gallop in Durham some fifteen miles distant, and began to reorganize. As disastrous as the day had been for English arms, matters could have been even worse. Rather than follow up the victory with the slaughter of the fleeing English, Leslie restrained his men to prevent the English from suffering high casualties, which might in turn have unleashed a backlash against the invaders. An English officer wrote after the battle that it was certain "if Leslie had pursued his victory he had cut us all off. We had neither cannon nor ammunition by us, but went on like sheep to the slaughter."

As evening fell the last rays of the sun revealed the Scots in full control of Newburn ford. The losses suffered by each side are uncertain, but most likely in the hundreds for each side. One English report alleged about five hundred casualties, and another claimed four hundred. Scottish losses were probably similar, or slightly less given that many English losses would have come as their forces broke from the battle and sought to retreat.

Neither side was in a condition to rejoin hostilities, although Leslie had to consider the possibility of English raiding parties harassing his army and perhaps even trying to attack isolated units. But with many of the English leadership captured, Conway had few means, even if had felt the inclination, to bother the victorious Scots. So the Covenanters, unmolested by the English, conducted a worship service in the hamlet of Ryetown to give thanks for the apparent Divine protection they had enjoyed. The English commanders, on the other hand, were pressed by more urgent concerns.

The situation at Newcastle was the first worry of the English commanders. The matter of the city's incomplete fortifications remained. The works on the north side were still not complete and there existed virtually no obstacles to a Scottish advance from the south. Now that the Scots had carried the Tyne, an approach from any direction was feasible. Even though the town possessed adequate quantities of provisions, including cheese, biscuit, powder, and muskets, it lacked bullets and cannon balls—not that the latter could have served too important a purpose since a portion of the artillery needed by the English commanders was not yet present. The two guns saved at Newburn Ford augmented the garrison little. The infantry who arrived in the darkness were exhausted from the day's fighting and were in no shape to present a stout defense on the morrow. And finally, the bulk of the English cavalry were in Durham, or at least somewhere in between and not readily available for commitment.

Conway came to the only conclusion that such a grim assessment warranted.

During the night of 28 and 29 August, Conway ordered his troops and artillery to take the road towards Durham, and shipped as much gunpowder out by sea as he could load.

Hyde later condemned Conway's actions after the battle for "never after turning his face

toward the enemy, or doing anything like a commander." Conway certainly must be faulted for his refusal to develop and execute a defensive scheme. Opportunities to stop the Scots had been present, first while the invading host marched some eighty-five kilometers virtually unopposed into English territory, and then again during the afternoon's fight at Newburn ford. By the time Conway ordered the evacuation of Newcastle, the military issue had been decided. 104

The next day, 29 August, Leslie sent the rest of his army over the Tyne. Secure from direct attack, Leslie sent Sir William Douglas, the sheriff of Teviotadale, to summon Newcastle to surrender. Learning that the English army had moved southward, Leslie spent the day marching towards Newcastle and refitting his forces. The next day, a Sunday, the Covenanters entered Newcastle, England's most prominent city in the northeast. Most persons of station had already fled. To their chagrin the hungry Scottish troops noted that this included a great many bakers and millers as well. Thorough searches however, revealed substantial stores of cheese, some biscuit, and plenty of beans, peas. The officers were pleased to locate ammunition. 105

To appease the Scots and assure them of the town's passivity, city officials extended a reception for their new keepers. Afterwards, Leslie and his senior officers, as well as many soldiers, attended church in the city where they listened to sermons of thanksgiving. But the Scots were not in the mood for celebrations. Leslie reported, "I am fortifying the towne as well as I can We shall be fullie resolved in short time what is to be expected from hence, either for peace or warre."

While their occupation of Newcastle provided the potential leverage that might address the Covenanters' political problems, their army also needed supplies. The fact

that the Covenanter's supply system was by this time completely overextended did not surprise the Scots. Every day that Leslie marched into England meant that his army was a day farther from many types of non-perishable provisions, as well as replacements and fresh funds to buy food and forage. All early modern armies faced severe logistical constraints. The Scots had organized and moved their army this far due to the expertise of their leaders and the generally high level of preparation of their soldiery. But now the long distance from Scotland, the lack of significant naval support, and the presence of the English garrison far in the Scots' rear at Berwick, exacerbated the Scots' situation.

To alleviate his immediate shortages, Leslie ordered the formal seizure of all military supplies in and around Newcastle, to include not just weapons and ammunition, but also general provisions and ships as well. He declared that £10,000 of royal funds were a lawful prize of war, all revenue from coal production be sent to the army, and that money be collected from recusants. Nonetheless, the army needed constant replenishment of foodstuffs, and their lack caused many men to desert. 108

By 10 September the supply situation had deteriorated to the point that the Committee of the Army ordered a Colonel Alexander Leslie to Morpeth and the surrounding area. There the colonel was to demand food from the inhabitants in exchange for compensation. Of course, if the inhabitants proved unwilling to comply with the transaction as established by the Scots, provisions would be taken by force. To pay for these supplies, Leslie needed more money. Therefore the Scots demanded the local authorities in the two shires near Newcastle, as well as the town itself, should provide an £850 per diem. Furthermore, the Scots expanded their collection of moneys from church properties and collected the rents due the bishop and cathedral chapter of Durham in

advance. By the middle of September, there were incidents of soldiers pillaging vacant houses although non-recusants who paid fees to the army were supposedly protected from invasion.

Leslie had to keep in mind the security of his army too. He was well aware that although he had defeated the English army sent to oppose him, he yet remained within his enemy's territory. He could not be sure of what the English commanders would choose to do next. And in addition to the supply problems confronting his army, Leslie faced the challenge of garrisoning the territory he had won. The capture of Newcastle and the surrounding areas had been a rich political and military prize but one that immensely burdened his army's deployment capacity. Hence Leslie requested five to six thousand new recruits from Scotland.

In addition to working through his logistical problems, Leslie was also strengthening his tactical posture. The Covenanters first garrisoned Tynemouth and the Shields, to ensure control of the river route. Leslie then sent a mixed force of infantry and cavalry, led by Charles, second earl of Dunfermline, to seize Durham, which they accomplished on 4 September. Two weeks later they had pushed another eighteen miles into England as far as the River Tees where they established an advanced outpost line by the eighteenth of the month. ¹⁰⁹

With the English chased from the region south of Newcastle, the Scots paused while to allow political negotiations to proceed. While on the one hand they needed time to configure their army for any continuation of the campaign, the logistical constraints facing the Scottish troops meant that local sources of supply would have to be obtained before any further advance. But even if the Scots marched no farther, their mere

presence, including the fact that the soldiers needed to be fed if they were to stay orderly, meant that the Scottish leadership held a negotiating advantage. The English did not want to see a victorious Scottish army moving through England, but they hardly wished for a villainous Scottish mob living indeterminably near Newcastle either. The dilemma was unfortunately for Charles, one that he could not easily remedy. Only the taxing power of Parliament could secure the money needed to meet Scottish demands. Therefore the military and logistical problems of the Scots led straight to the necessity for a negotiated political settlement involving both king and parliament. As the days and weeks of September waned, it became clear that the active campaigning by the armies in the field was at an end. A political settlement of tremendous moment was at hand.

In the event, Scottish calculations that politics were to assume primacy over military operations proved prescient. Such is the effect that a single battle can have upon ensuing decisions and events. ¹¹⁰ By mid-September the English leaders' will had been sapped by political infighting. Instead of supporting the king, the Council of Peers readily endorsed the Covenanters' demands. The Treaty of Ripon concluded on 16 October and accepted by Charles on the 28th brought the final termination of military operations.

The Covenanters had won the tactical battle at Newburn because of well-placed artillery, aggressive small unit leadership, and massing of cavalry and infantry at the decisive moments of the fight. The Scots' performance was a testament to the military preparations and aptitudes present in the kingdom by the late 1630s. Newburn was perhaps the act that mattered most, because had the Scots lost the contest, their position, while by no means hopeless (they were eighty kilometers inside the enemy's territory), would have been precarious. It was the key military event that led to the decisive political

decision. However, the Covenanters' superior military comprehension neither began nor ended with Newburn. The Scots defeated their foe on the field of battle because they were able to reach the interior of England and bring the Royalist army to heel.

The seeds of victory at Newburn took root in the early spring when the Scots capably established the conditions for strategic success. The Covenanters isolated the English threat in their own capital by besieging Edinburgh Castle. Then they subdued the Scottish countryside, especially the royalist-leaning north. And finally they assembled and postured an army west of Berwick that could achieve the task Leslie was to set as its task.

In operational terms, Leslie expertly maneuvered against the English by maintaining his flexibility and adopting a scheme that threw the English into confusion. His choice of crossing the Tyne at Newburn rather than either at Hexham, or before Newcastle, proved the final nail for the English. With virtually no plan of their own, the Royalists could not react to this thrust in the very center of their area of operations. Conway knew that Newcastle was important, he knew that Leslie had to cross the Tyne, and he understood that several ford sites existed. But he devised no plan for the eventuality that Leslie would fail to follow the English playbook. There is no doubt that hesitancy of the military leadership throughout northern England, frayed relations between Charles and the localities that hindered recruiting, and political infighting at the highest levels, disrupted the Royalist war effort. Nonetheless, the English did not lose the battle at Newburn and hence the Second Bishops' War. Rather, the Scots won. An English army did find its way to the line of the Tyne where it was demolished. Had the Scots not created, fielded, and maneuvered an army that far south, there would have been

no battle, no victory, and no defeat. English inadequacies seem so apparent because their shortfalls must be contrasted with Scottish achievements. The Covenanters vanquished their adversary by incorporating the latest doctrine and weaponry with inspired leadership and united political support. Ultimately the Scots won because they deserved to win.

Perhaps of even more import for the immediate future, the Scottish victory placed Charles in the most difficult position of his reign. Already reeling from the outcome of the 1639 debacle, he faced the inevitable prospect of ever-larger indemnities and of another humiliating retreat in the face of the rebellion he had vowed to crush. With Scotland now virtually assured of the capacity to act independently and the growing restiveness of Parliament in London, Charles' authority reached its nadir. Britain teetered on the verge of civil war.

¹CSP (1639-1640), 57. Also cited in C. S. Terry, *The Life and Campaigns of Alexander Leslie, First Earl of Leven* (London, 1899), 89.

²Ibid., 113.

³Extracts From the Council Register of The Burgh of Aberdeen, 1625-1642 (Edinburgh: Scottish Burgh Records Society, 1871), 11 Feb 1640, 231.

⁴Stuart Reid, *The Campaigns of Montrose: A Military History Of The Civil War in Scotland, 1639 to 1646* (Edinburgh: The Mercat Press, 1990), 29. Also see James Balfour, *The Historical Works*. Vol. II (Edinburgh, 1824), 371. Captain Slingesby and CPT Shipman brought 300 soldiers, arms, ammo by sea for Edinburgh Castle for the royalists.

⁵CSP (1639-1640), 439, 468, 483, 554. Also cited in Terry, 92.

⁶"Commission to Sir Alexander Leslie of Balgony to be General of the Forces, 17 April 1640," reprinted in Sir William Fraser, ed. *The Melvilles: Earls of Melville And The Leslies: Earls Of Leven.* 3 vols. (Edinburgh: 1890), 164. The entire text of Leslie's commission, as well as that of 9 May 1639, is reprinted here, p. 162-166.

⁷Margaret Wood, ed., *Extracts from The Records of The Burgh of Edinburgh*, *1626 to 1641* (Edinburgh: Oliver and Boyd, 1936), 234.

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<sup>8</sup>NAS, GD112/39/79/2, 2 May 1640.
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¹³NAS, GD112/39/79/5, 10 May 1640, Also mention of request to "send[s] colors and staff with some ribbon to bind on the point and handle of the staff."

¹⁵Terry, 90, 91. Scottish political leaders were concerned that Leslie would not accept the command of military forces. Sir Livingstone of Almond, afterwards Earl of Callander, was mentioned as a potential substitute.

¹⁹David Stevenson, *The Scottish Revolution: 1637-1644: The Triumph Of The Covenanters* (New York: St. Martin's Press, 1973),189. Monro sent at least twenty-six persons to Edinburgh after his arrival.

⁹GD112/39/78/15, 15 April 1640.

¹⁰Ibid., 17 Apr 40, 238.

¹¹Ibid., 13 Apr 40, 237.

¹²Ibid., 24 Apr 40, 238.

¹⁴Balfour, 379.

¹⁶Fraser, "Commission to Sir Alexander Leslie...", 163-165.

¹⁷NAS, GD112/39/79/12, 30 May 1640.

¹⁸Map by the author.

²⁰Extracts From the Council Register of The Burgh of Aberdeen, 1625-1642. (Edinburgh: Scottish Burgh Records Society, 1871), 207-208.

 $^{^{21}} Extracts\ From\ the\ Council\ Register\ of\ The\ Burgh\ of\ Aberdeen,\ 222-224,\ 2$ June 1640.

²²Ibid., 238, 19 Aug 1640.

²³NAS, GD112 /39/78/11, 1 April 40. Also in Balfour, 381.

²⁴Balfour, 382.

²⁵James Gordon, Parson of Rothiemay, *History of Scots Affairs*, vol. II (Spalding Club, 1842), 211.

³⁹Edward Furgol, "Beating The Odds: Alexander Leslie's 1640 Campaign In England." (Unpublished, 1994), 9. Also, Balfour, 383. At least 2,500 quartermaster and support troops also accompanied the army. The Earl of Montrose had two regiments, one of Perthshyremen, one of Forfarshyremen; See as well, Venetian Ambassadors/Secretaries, *The English Civil War: A Contemporary Account, 1640-1642*, Vol II. (London: Caliban Books, 1996), 28,29, Letter 14 September 1640; and importantly, NAS RH 13/18 for an account of the crossing and subsequent Scottish actions through the battle of Newburn.

⁴⁰Furgol, "Beating the Odds," 9, and Balfour, 383. Sir John Clavering, who observed the Scots, noted that not all of the Covenanting force was equipped with the latest weaponry. He commented that the Highlanders possessed bows and arrows, and were "the nakedest fellows that ever I saw." The Scottish horse was armed with pike staves, swords, pistols, and a few petronels, while the foot wore "not so much as a gorget or cotslet." He went on to say that muskets, swords, and staves nearly five feet long, with pikes at both ends, were equally present, and that the whole force wore blue caps. In terms of artillery, the Scottish guns were drawn in "great close waggons bigger than horse

²⁶NAS, GD 112/39/78/20, 3 April 40.

²⁷NAS, GD112/39/78/2, 9 April 1640.

²⁸NAS, GD112/39/81/8, 19 August 1640.

²⁹NAS, GD75/642, 4 June 1640.

³⁰NAS, GD112/39/81/7, 13 August 1640.

³¹Stevenson, 189.

³²Martyn Bennett, *The Civil Wars in Britain and Ireland*, *1638-1651* (Oxford: Blackwell Publishers, 1997), 66.

³³Map below by the author.

³⁴Ibid., 15. The tract read was written by Alexander Henderson.

³⁵NAS, GD112/39/81/7, 13 August 1640.

³⁶NAS, GD112/39/81/7, 13 August 1640.

³⁷NAS, GD112/39/81/7, 13 August 1640.

³⁸NAS, GD 112/39/81/12, 29 August 1640, Edinburgh, Letter from Mr. D. Prymrois to Sir Colin Campbell.

litters," the gun-carriages being advanced by pairs of men, one to each large wheel. See Rushworth, *Historical Collections*. vol. III (London, 1680), 1223.

⁴¹Writing from Berwick, Conyers provided to his superiors in England an estimate that the Scottish army consisted of no more than eight thousand men, furnished with thirty waggons "laden with things like harrows," which were intended, lie supposed, either for entrenching their camp, or as impediments to the charge of cavalry." Reprinted in Terry, 102. An Englishman who had entered the Scottish camp outside Duns reported nineteen regiments present, and eight more expected. He also counted ten thousand sheep and five hundred cattle, and the troops provided with "a canvas tent for every six soldiers, a free gift of their dear sisters of Edinburgh, that they should not spoil the hedges and groves of any in England." CSP (1640), 587.

⁴²CSP (1639-1640) 109, 155, 295, 301, 321. Cited in Terry, 90-91.

⁴³CSP (1640), 68, 69.

⁴⁴Ibid.

⁴⁵CSP (1640), 73.

⁴⁶The year prior, on 17 January 1639, seventeen of the county's deputy lieutenants and militia colonels had signed a petition to Charles asking him to reconsider his decision to deploy the trained bands beyond the county's border. At least seven Yorkshire regiments did assemble and were prepared to fight the Scots during the First Bishops' War, but discontent at this early stage is indicative of the state of unrest confronting the royalists in the summer of 1640. See David Scott, "'Hannibal at our Gates': Loyalists and Fifth-columnists during the Bishops' Wars—the case of Yorkshire," *Historical Research* 70 (October 1997): 269-271.

⁴⁷CSP (1640), 275.

⁴⁸CSP (1640), 571.

⁴⁹CSP (1640), 588, 601. Strafford admonished Conway not to pursue this course. "For love of Christ," he wrote, "think not so early of quitting the town, burning of suburbs, or sinking of ships." Three days later he wrote: "The noise of the coming of the Scotch rebels has given us such an alarm here [London], that the King is resolved to go to York". Conway was to hold Newcastle till his arrival. "Surely," Strafford continued, "it is a service which will turn much to your honor if you can by any means stop them there. So I beseech you, as well for your own private as the public [good], to intend it by all ways possible, which I conceive may be effected by making some entrenchment on the north side of the town, and we keeping the enemy from seizing those vantage grounds that command the town on that side." Ibid.

⁵⁰Ironically, on the following the earl and several of his officers were killed when a servant ignited the powder magazine in Dunglass Castle.

⁵¹The disposition of 23 August with the foot at Brandon Hills and horse at Lemmington suggests such a plan, as does that on the 24th with infantry quartering in Edlingham and Newtown.

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<sup>52</sup>Venetian Ambassadors, 28, 29.
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⁵³CSP (1640), 619.

⁵⁴CSP (1640), 620, 626.

⁵⁵Terry, 112.

⁵⁶CSP (1640), 634.

⁵⁷The sallies from Berwick, as proposed and executed by Conyers, were an example of this sort of operation. The problem with the Berwick garrison's attacks was that they were too small, unsustained, and not coordinated. See CSP (1640), 576.

⁵⁸CSP (1640), 584.

⁵⁹The Earl of Loudon wrote to Hamilton on the 20th with word that a possible second Scots army consisting of "10,000 foot and some horse" were on the heels of Leslie's force. See NAS, GD406/1/1218.

⁶⁰CSP (1640), 581.

⁶¹CSP (1640), 590.

⁶²CSP (1640), 603.

⁶³For a complete account of the English preparation and conduct of the Newburn campaign see Mark Charles Fissel's *The Bishops' Wars: Charles I's Campaigns Against Scotland, 1638-1640.* Cambridge Studies In Early Modern British History. (Cambridge: Cambridge University Press, 1994). I have omitted most detail regarding the English forces because Dr. Fissel's work presents the best exhaustive narrative of these events.

⁶⁴Cited in Terry, 111.

⁶⁵CSP (1640), 628.

⁶⁶In political terms Conway certainly knew what was happening. On the 13th of August he received a copy of the tract printed in Edinburgh, "The Lawfulness of Our

Expedition Into England Manifested." Said Conway of it, This manifest that the Scots have set out is a pestilent piece, and sundry copies of it are spread in London and other parts." See Ogilvie, 16.

⁶⁸This was one of Conway's mistakes. He left too many troops inside of Newcastle, thus depriving him of soldiers where he needed them most—on the battlefield fighting the Scots.

⁶⁹Ibid.

⁷⁰Terry, 112-113, and NAS, GD 112/39/82/4, 2 September 1640, Report from the Committee with the Army to the Committee of Estates at Edinburgh.

⁷¹ Ibid.

^{72Fissel,} 55. Also quoted in Terry, 121.

⁷³J. Burnet, *History of His Own Time*, [Hamilton], vol i, (1724), 28. Quoted in Terry, 121.

⁷⁴David Clark, *Battle Field Walks: North* (London: Grange Books, 1997), 105.

⁷⁵CSP, (1640), 615, 629. Cited in Terry, 121, Note 1.

⁷⁶Which gives rise to the suggestion that Leslie not only anticipated a battle with the English, but welcomed it as well.

⁷⁷Furgol, "Essay," 14.

⁷⁸Lieutenant General Amont, Lord Ker, General Major Lesley, and the Earl of Montrose were members of this party. NAS, GD 112/39/82/4

⁷⁹Fissel, 55.

⁸⁰Fissel discusses English strength on p. 54-55. The author of NAS RH13/18 f.24, noted English forces at Newburn to be five thousand foot and 2,500 horse.

⁸¹Contemporary observers disagree regarding the size of the forces involved. Vane gives Conway two thousand five hundred foot in addition to his cavalry; Gordon allows the English three thousand foot and twelve hundred horse, and to Leslie, twenty-four thousand foot and two thousand five hundred horse. CSPD, (1640-41), 38 and Terry, 120-121.

⁶⁷Reprinted in Terry, 114, 115.

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<sup>82</sup>Rushworth, vol. III, 1237.
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⁸⁷Ibid. Again observers of the battle disagree on several details. Gordon mentions only one work, while Spalding does not mention the fall of the second. Vane's dispatch mentions" the works," but does not indicate the time of its fall. Other sources are equally vague. I have reconstructed events according to how I feel the terrain best supports the documentary reports.

⁸⁹HMC Middleton, *Report on the Manuscripts of Lord Middleton* (Preserved at Wollaton Hall, Nottinghamshire: Hereford, 1911), 193.

⁹⁰Lunsford, only thirty years old, had been pardoned for an alleged murder attempt the prior year, and had participated in numerous brawls with his soldiers as they marched to the Borders.

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<sup>91</sup>Balfour, 385-386.
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⁹⁸NAS, GD 406/1/1219, Loudoun to Hamilton, 2 September 1640. It seems that at least a portion of the Scottish infantry remained too far back on the northern shore to affect the fighting.

⁸³ Ibid.

⁸⁴NAS, GD 112/39/82/4

⁸⁵ Ibid.

⁸⁶Rushworth, vol III, 1238.

⁸⁸James Gordon, in Terry, 137.

⁹²Fissel, 56.

⁹³"Sure Newis from Necastell and from the Scottish Army," printed in Terry, 136.

⁹⁴Map below by the author; based on Ordnance Survey Map.

⁹⁵ Middleton, 193.

⁹⁶Ibid.

⁹⁷Furgol, "Essay," 15.

⁹⁹From the staunchly Covenanter shires of Ayr, Lanark and Fife.

 100 Spalding adds that Sir John Suckling's troop was also routed. One of its horses was captured and presented to Leslie.

¹⁰¹Historical MSS Report, vol vii, 434. Cited in Ogilvie, *Bibliography*, 17.

 $^{102}\mathrm{NAS},$ SP 16/465/38, Secretary Vane to Windebank, 29 August 1640. See also Terry, 120.

¹⁰³See Huntington Library, EL 7857, 3 September 1640 and Venetian Ambassadors, 29, Letter 14 September 1640. Rushworth and Spaulding claim English losses of less than one hundred. See Appendix A. Terry discusses the matter of casualties on p. 122, Note 1.

¹⁰⁴See Fissel, 59 for an account of English shortcomings.

¹⁰⁵NAS, GD112/39/82/4, 2 Sep 1640.

¹⁰⁶NAS, GD 75/590, 18 Sep 1640.

¹⁰⁷Leslie thought that the English, particularly Roman Catholics, were charging the Scots too much for provisions.

¹⁰⁸Furgol, "Essay," 18.

¹⁰⁹Ibid.

¹¹⁰Clarendon described Newburn as "the most shameful and confounding Flight that was: ever heard of, "a particularly harsh judgment. *History of the Rebellion*, vol I, 190.

CHAPTER 6

CIVIL WAR IN BRITAIN

As the Royalist soldiers in and around the English village of Kineton stirred themselves in the cool dark hours before daybreak on 23 October 1642, they no doubt felt a heavy sense of dread regarding what might transpire with the coming dawn. The conflict engulfing their nation had proceeded unchecked until at last opposing armies were in the field, and battle was in the offing. Robert Devereux, Earl of Essex commanded the Parliamentarian force that was located nearby. King Charles I himself was present and determined to lead his own forces in the coming fight.

The road to the Battle of Edgehill had become more apparent during the summer when Parliament refused to provide Charles with an army to fight the Irish Catholics who were in rebellion. In response, Charles called for the nobility to rally to his cause. He concluded that a rebellion was underway in England itself that must be suppressed. In August the King unfurled his banner near Nottingham. Parliament responded by assembling its own army, and the English Civil War was underway.²

The raising of opposing forces occupied the late summer and early fall. To mobilize an army, the King relied upon the traditional Commissions of Array by which government officials and nobles in each county could organize troops and assemble regiments. Parliament, established in London, enjoyed the advantage of the city's ample magazines and sources of finance. As is often the case when warfare is conducted within a state, the objectives being pursued by each side were uncertain. Hence the most expeditious means to terminate the fighting were equally unknown.³

It was clear to all, however, that the first and foremost task was to field armies. A credible military force was the necessary prerequisite to any settlement. But armies cost a great deal of money, so once composed, senior commanders were expected to achieve a decision with them. Charles obviously wished to reassert his authority and establish a royal authority to command England's armed forces at his discretion. But the point at which Parliament would concede was not known. The Parliamentarians' aim was neither to destroy Charles personally, nor to eliminate the monarchy. Rather, their strategic objective was to bring Charles to submit to their political will. Given these uncertain vantage points, it is not surprising that the war would ultimately last far longer and inflict far greater costs than adherents on either side imagined at the time. The one sure avenue apparent in 1642 was that maneuver alone could not determine the contest despite the efforts such as those exerted in the opening campaign illustrated below⁴

The Royalists moved first, departing Shrewsbury on 12 October, headed for London some 150 kilometers to the southeast. The King traveled cautiously, avoiding Parliamentarian strongholds. Essex meanwhile, moved to counter the Royalists' march by departing Worcester on the nineteenth and arriving in and around Kineton late on the twenty-second. Essex's march of fifty kilometers in about four days was typical for these newly formed armies. Twelve to fifteen kilometers of marching per day was all commanders could exhort from their men, given the dismal condition of the roads and awkward baggage and artillery trains accompanying the march.⁵

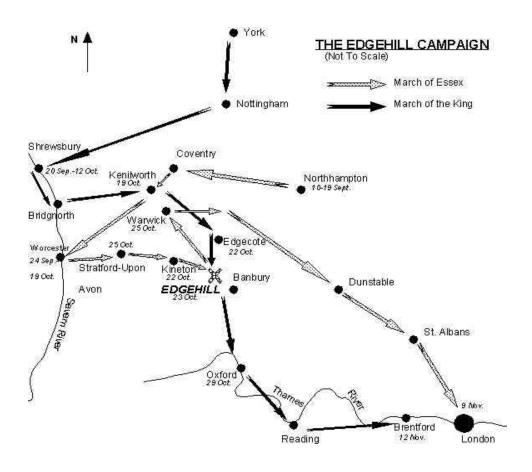


Figure 11. Edgehill Campaign, 1642. Source: Map by Author.

The reconnaissance effort conducted by each side was inadequate. Cavalry training at this early stage of the war still emphasized the role of heavy cavalry. While independent operations by horse were understood and commanders attempted to apply cavalry to raid or gather information, controlling these movements was exceedingly difficult. Hence cavalry employment continued to be envisioned within the context of battle and rarely in terms of direct support for operational maneuver. Commanders often

operated blindly, without firm information of their enemy's whereabouts. This was the situation that developed now.

By 20 October, the two armies were separated by about thirty kilometers, and each was moving southeastward on relatively parallel tracks. Yet neither side appreciated the proximity of the enemy. Remarkably, the distance between each army and London was equidistant. Essex was south but also slightly west of the Royalists' route to London, but was in no way blocking it. In effect, if the Royalists were to execute an expedient march to the capital city, the door was open to a decisive victory or at least capture of the Parliamentarian center of gravity and its plentiful stores.

But such was not to be. Charles called a council of war at Edgecote on 22

October, and unaware of the true operational situation, dispersed his army to quarters among the surrounding villages for a period of rest and the requisition of supplies. In the event, rest would be brief for all; the armies were simply too close to one another and a run-in was nearly inevitable. Fortunately for the King, that first encounter happened under the eyes of his most able subordinate.⁶

After the council dispersed, Prince Rupert, the King's nephew and aggressive commander of cavalry, proceeded to his assigned billet near the hamlet of Wormleighton to stay the night. Entering the village, a detachment of his quartermasters surprised a group of Parliamentarians also in town to secure provisions. The Royalist troopers had the edge and captured several of Essex's horsemen. Based upon the intelligence revealed by the prisoners, Rupert sent a patrol to Kineton to determine whether indeed a Parliamentarian concentration was underway only a few short kilometers away. When they returned breathless with the message that the Parliamentarians were indeed present

in force, Rupert's first reaction was to attack at once. But his cavalry was dispersed and fatigued, and there was no means to gather the foot or artillery. So in the gathering autumn dusk he forwarded the intelligence to the King and waited.

Charles was awakened in the middle of the night by Rupert's message.

Meanwhile, other information began to filter in to corroborate what Rupert's men had witnessed. Apparently Essex was moving to support the Parliamentarian garrison at Banbury. Rupert had spotted a long ridge to the south, known as Edge Hill. It was here he recommended that the King assemble the Royalist host. Doing so would force the Parliamentarians to give battle as Edge Hill sat squarely between Essex's army and London. The Parliamentarians would have to fight the Royalists on ground of their own choosing, or concede a head start in a race to London. Rupert reasoned that the capital was a loss that the Parliamentarians could not afford to risk. They would fight and the King would have a victory.

At Essex's own council of war that same evening, there was precious little new information to act upon. Essex and his senior leaders were unaware of the gathering Royalist host nearby. Consequently the Parliamentarian commanders departed their meeting with their agreed-to plan to move to Banbury still intact.

As the first rays of sunlight touched the bare slopes of Edgehill, Prince Rupert anxiously looked across the gently sloping valley towards Kineton, and impatiently awaited the arrival of his forces. He had plenty of time to contemplate the upcoming action--the Royalist army was slow to arrive. His horse had orders to be there by eight o'clock a.m. but did not show until midmorning; the infantry and the guns were not in place until the afternoon was well under way.

Essex's predicament was even more dire. As it was Sunday, early in the morning he dressed and prepared to attend worship services. Enroute he was startled by the news that the Royalist army was taking up positions just to the south of Kineton and were obviously preparing for battle. Essex hastily issued orders for his army to assemble opposite the enemy. His regiments were widely scattered and it would take hours to gather his army into a coherent fighting force. Time was decidedly on the side of the Royalists. The basic sequence of battle actions is illustrated below.

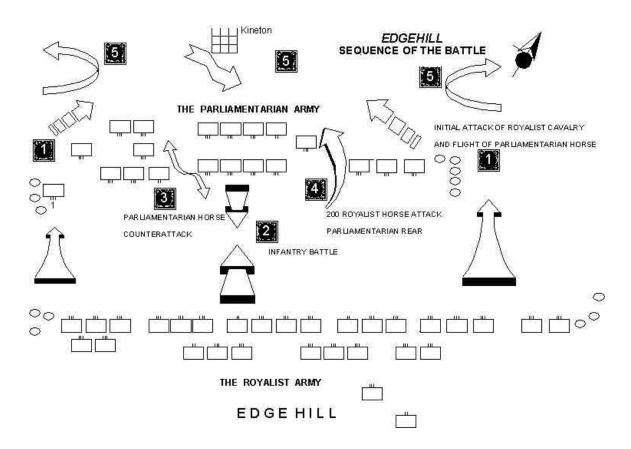


Figure 12. Edgehill Battle. Source: Map by Author.

Some of the Parliamentarian forces were too far away to hold out any prospect of being committed to battle. Three regiments of foot, nearly a dozen troops of horse, and a small train of artillery were a day's march away. Fortunately, Warwick castle, a Parliamentarian stronghold, was to the rear if a retreat were necessary. Essex was a cautious commander, and he would not take a decisive action in any direction other than to call for his army to unite south of Kineton, oriented on the Royalist army assembled there.

While the Royalist leadership watched the Parliamentarians finally emerged onto the battlefield, a squabble over dispositions and tactics ensued. The Earl of Lindsey, Lord General and in effect, the commander-in-chief of the Royalist army, insisted that he command the whole army, to include the cavalry. He also advocated that the Royalists deploy their troops in accordance with the Dutch model. As General of the Horse, Rupert jealously guarded his prerogative and insisted that he be permitted to report directly to his uncle, the King. Furthermore, he advocated that the foot be aligned according to the Swedish model he had experienced on the continent. Charles, perhaps expectedly, ruled in favor of his nephew. In a huff, Lindsey returned to his regiment to fight at its head as colonel of the regiment without further responsibility, asking only that he directly oppose Essex, whom he hoped to personally engage in battle. Charles nominated Patrick Ruthven, recently awarded the title of Lord Forth by the King as reward to his defense of Edinburgh Castle, to lead the Royalist army and to follow Rupert's suggestion. With Charles and Rupert both on the field, Ruthven's contribution to the fighting to come would be limited.

As the senior officers quarreled, the rest of the Royalist army continued to deploy. Edge Hill itself was rather steep, and the Royalists wanted an engagement, so to draw on the Parliamentarians they moved down the slope to a position where the ground leveled somewhat before falling away further towards Kineton. Rupert's body of horse, five regiments in strength, took up positions on the right wing, opposite the road to Kineton, while Lord Wilmot's horsemen guarded the army's left. A regiment of dragoons supported each wing adjacent to the cavalry. It is likely that the remainder of the dragoons aligned in the center and ahead of the main line of infantry in a sort of skirmish line whose duty was to disrupt the opponent's infantry arrangements. One observer noted, "before every body of foot were placed two pieces of cannon, and before them the dragoons." As this statement indicates, each infantry brigade was equipped with two cannons. Six heavier guns were placed in battery several hundred meters behind the infantry.

A shortage of musketeers probably dictated in large measure the final disposition of the Royalist infantry. Most regiments could muster equal numbers of musketeers and pikemen, but no more, certainly not at this early stage of the war, the ratio of two musketeers to one pikeman required by contemporary theory. To concentrate firepower, Ruthven adopted a style of the Swedish model with each brigade arranged in a diamond formation. The lead battalion placed its pikemen forward with the musketeers directly behind them. In the two battalions to the left and right rear of the point battalion, the pike were located in the center and the musketeers on the outside of the unit. The final battalion was arranged just like the leading formation. In this manner the five brigades of infantry aligned with three in the front line and two supporting in the second. In sum, the

Royalist army numbered over two thousand cavalry, one thousand dragoons, and more than ten thousand infantry.⁹

The disposition of the ten thousand Parliamentarian troops was most likely similar. The official account notes that Essex brought to the field eleven regiments of foot, forty-two troops of horse, and two regiments of dragoons. Essex's right was occupied by Lord Fielding's regiment of horse and the entire Parliamentarian force of seven hundred dragoons. General of the Horse, the Earl of Bedford also located on the right with about fifteen troops (800 men).

The center consisted of two lines of infantry, the first held by the brigades of Sir John Meldrum and Colonel Charles Essex, and the second by Colonel Thomas Ballard.

Artillery pieces may have been located in pairs between the infantry brigades, but most of Essex's guns missed the battle. Only seven pieces can be confirmed to have been present.

Defending the left was Sir John Ramsay's brigade of horse. Since all of the dragoons were with the other flank of the army, some six hundred musketeers were drawn out of Ballard's rear brigade to augment Ramsay's force. To defend against a cavalry attack, Ramsay placed several hundred of these men within a hedgerow at a right angle to his main line with the intent of destroying any charging enemy with a suffocating enfilade fire.

With the forces on each side formed on the battlefield, the Parliamentarians opened fire first in the form of a rather desultory artillery bombardment. Why Essex provoked the fight is not known. It could have been that he finally recognized that Charles had gained an operational advantage by interposing the Royalist army between the Parliamentarians and London. Or it could have been that the artillerymen simply grew

impatient with the waning afternoon. In any case, the indirect fires were not decisive.

Characteristically, it was Rupert on the Royalist right wing who acted first to break the stalemate. Identifying the enemy's forward line of dismounted troops to his front, he sent a regiment of dragoons under Colonel James Usher to clear the Parliamentarian musketmen, a feat they ably accomplished. Rupert steadied his men: "Just before we began our March, Prince Rupert passed from one wing to the other, giving positive Orders to the Horse, to march as close as was possible, keeping their Ranks with Sword in Hand, to receive the Enemy's Shot, without fireing either Carbin or Pistol, till we broke in amongst the Enemy, and then to make use of our Fire-Arms as need should require; which Order was punctually observed." 10

Rupert's troops advanced briskly, starting at a canter and then closing the final yards in a full gallop. The Parliamentarian musketeers acting as dragoons quickly scattered. Opposing Rupert was Sir James Ramsay's horsemen but they were now rattled by the quick dispersal of their covering dragoons. The Royalists continued their attack "till they came up close to the Enemy's [Parliamentarian] Cavalry, which after having spent their first fire, immediately turn'd their backs, the Royalists pursuing them with great eagerness." The Parliamentarians had fired their carbines too soon to slow Rupert's approach. The Royalist horse continued to advance and gain momentum while Ramsay's men were standing still. The knowledge of the impending shock was too great for many to bear. The Parliamentarian cavalry fled precipitously, some even before Rupert's ranks crashed among them. Within moments, the entire left wing of the Parliamentarian horse, to include regiments from both Ballard's and Charles Essex's infantry brigades were in headlong retreat towards Kineton and the baggage trains. But instead of turning on the

remaining Parliamentarian infantry, Rupert's men maintained their pursuit and departed the immediate scene of battle.

A similar scene transpired on the opposite flank. Lord Wilmot's Royalist cavalry broke the regiment of Lord Fielding, and again cavalry and dragoons of both armies rushed away towards Essex's baggage trains. At this moment with the majority of Parliamentarian cavalry and a good number of the infantry as well, essentially swept from the field, the Royalists appeared near victory. But the Parliamentarian infantry in the center of the field stiffened. The Royalist horse, flush with their apparent triumph and simply exhausted from riding and pillaging, were either unable or unwilling to affect the outcome of the remaining infantry battle.

Under the leadership of Sir Jacob Astley, five brigades of Royalist foot bore down on the now unprotected Parliamentarian infantry. Unlike their brethren on each wing, these infantry regiments held their ground. A vicious, bloody fight ensued as the two forces collided "at push of pike, and with the butt-end of their muskets.¹¹ Musket fire, smoke and the shouts of injured men soon filled the air. The integrity of formations became almost nearly impossible to maintain amidst the swirling debris of battle. The Parliamentarian superiority in number of musketeers came to bear to the point that the Royalist footmen could not stand the withering fire brought upon them.

A small number of Essex's horse some of his own Lifeguard led by Sir Philip Stapleton and others under the command of Sir William Balfour had been positioned nearer the rear of the infantry and had not been driven from the field. These two units counterattacked into the reeling Royalist infantry. Sir Nicholas Byron's brigade of Royalists momentarily repulsed the Parliamentarians, but Balfour and Stapleton

regrouped and on their second assault caught the Byron's men in the flank and sent them running. Balfour had already defeated Richard Fielding's force, capturing Fielding himself as well as two of his colonels. The Parliamentarians even: "beat them to their [Royalist] cannon, where they threw down their Arms, and ran away; he [Balfour] laid his hand upon the Cannon, and called for Nails tonail themup, especially the two biggest, which were Demy-Cannon; but finding none, he cut the ropes belonging to them, and his Troopers killed the Canoneers; then he pursued the Fliers half a Mile." As the fighting reached a crescendo, the Earl of Lindsey achieved his wish of giving all for his King as he fell mortally wounded at the head of his regiment with a musket shot that broke his thigh. He would later be captured where he lay.

While the Royalist center was under pressure, the right fared better. Here the contest remained evenly matched, with neither side able to secure a decisive advance. A final rush of two hundred Royalist horsemen under the command of Sir Charles Lucas cut into a number of fleeing Parliamentarian infantry, but the attack quickly became disjointed amidst the tumult. Nonetheless the effort stabilized the Royalist position.

Each side battered, the fighting gradually receded as the light faded and dusk approached. Rupert's cavalry finally returned to the field in force, hurried along by the arrival of a brigade of Parliamentarian infantry at Kineton and too late to affect the day's events. The armies remained in place, exhausted and unwilling to admit defeat or claim outright victory. The losses on each side were about equal, near 1,500 dead, wounded, and missing on each side. The battle had been a draw and a harbinger of the many battles yet to come.

While each side had fought courageously, neither could claim superior tactical execution. The Royalists demonstrated operational excellence for successfully maneuvering the Parliamentarians into a battle to be fought at a time and place of their own choosing. They had sought a decisive battle and created the conditions that maximized their opportunity to win the fight--and they had nearly done so. The aggressive initiative displayed by the Royalist cavalry during the opening moments of the battle provided a tremendous advantage. But instead of completing the envelopment of their enemy, the cavalry had rushed after their already broken and defeated counterparts and had ignored the main body of Parliamentarian infantry still holding their positions. Given this chance, the Parliamentarian infantry had fought back, halted the Royalist foot, and in turn inflicted sufficient damage so that a serendipitous counterattack by the only cavalry remaining on the field, a small body of Parliamentarian horse, was enough to save the day for Essex.¹³

It was clear that commanders on both sides were attempting to implement the theory and practice that they had studied, witnessed, or contributed to earlier. As a group they recognized that decisive victory in battle could bring decisive political outcomes. They had attempted to raise and to equip regiments that maximized the firepower of muskets. And at Edgehill they deployed armies, and even debated that deployment on the Royalist side, in terms of continental formations and tactics. Infantry, artillery, cavalry, and dragoons, forerunners of units to be seen widely in subsequent decades, were all present and all performing their expected roles in the battle.

Shortfalls clearly remained. Essex did not protect London operationally, an omission that could have had grave consequences in terms of his logistic and political

support. The fact that the battle did not end decisively suggests both the squandered tactical opportunities that were present, as well as the fact that throughout the early modern (and later modern) period, a decisive battle was difficult to achieve. And commanders, while attempting to emplace theoretical formulas, often found their intent squandered by poor command and control. The departure of the Royalist cavalry to chase spoils is an example. The subsequent campaign unfolded much as it had prior to the battle.

The next day Essex slowly marched towards Warwick to lick his wounds, still apparently not recognizing that the door to London was open. Rupert recommended to his uncle that they immediately send a flying column of three thousand men to seize London. But instead the Royalist army leisurely limped to Oxford and did not reach Brentford and the outskirts of London until four days after Essex finally pushed his tired force into the capital. The campaign and battle of Edgehill, instead of opening and closing the English Civil War, instead would have to serve as an example of the kind of war the people of England, Ireland, and Scotland were now embarked.

Over the next three years the military campaigns of the Civil War were caught in the political tumult of shifting alliances and changing visions of the Britain that should emerge from the conflict. Nearly every political grouping proved transitory. Each side searched for solutions to the stalemate.

In 1643 Charles seemed to have developed a grand strategy. His three armies at least gave the appearance of acting in concert. ¹⁴ A northern army under the Earl of Newcastle was to occupy Yorkshire and march southward to Sussex. Sir Ralph Hopton

would lead a western army through the southwest towards London, and the King's main army confronted Essex in the Thames Valley. The plan, so to speak, began well.

By the end of July Newcastle's army conquered nearly all of Yorkshire, several towns in Lincolnshire, and was threatening to move into East Anglia. At the same time, Hopton overran Cornwall and Devon and linked up with other Royalist forces in Somerset. This combined Royalist force came into control of the South West of England when it triumphed at the Battle of Roundway Down on 13 July. Rupert further struck at Parliamentarian morale when he captured Bristol on 26 July. Essex remained stuck in the Thames Valley, and suddenly Royalist hopes for victory appeared bright. In the midst of this crisis, Parliament undertook a major revision of its conduct of the war. To better support the armed forces, a series of financial ordinances and acts were agreed upon that established a number of assessments, compulsory loans, and excises, and also sequestered the property of the King's supporters. This major improvement in Parliament's fiscal resources was due to the fact that these measures more ably drew upon the resources of the entire country by tapping the wealth of the broader public rather than just the elites. Accompanying this financial reform was a reorganization of the army itself. The inadequacies of the militia system, with its inherent "localist" sensibilities, were evident. Parliament wanted armies that were much more "national" in scope.

A step in that direction came with the creation of regional associations. By grouping counties, Parliament was at least able to broaden the service requirements of its soldiers beyond the boundary of the individual county. To fill the ranks of these associations, Parliament approved several impressment ordinances on 10 August. Large numbers of Parliamentarian soldiers would henceforth not necessarily be volunteers. For

instance, the newly organized Eastern Association under the Earl of Manchester was empowered to conscript twenty thousand men.¹⁵

One final significant reform to benefit the Parliamentary cause was to gain a military alliance with the Scots. On 7 August, commissioners signed the Solemn League and Covenant, a pact the Scots signed because they believed that a victory by Charles would spell the end of the Covenanting cause. The Parliamentarians agreed because they needed soldiers and as the map below illustrates, no side had gained a clear edge to date. ¹⁶

This arrangement paid handsome dividends when a Scottish army of 21,000 men led by Alexander Leslie crossed the English border in January 1644, and pushed Newcastle's army back towards York. ¹⁷ In March, Charles' western army was destroyed at the Battle of Cheriton. And in a major engagement on 2 July, troops under Sir Thomas Fairfax, and the new Eastern Association force defeated Newcastle and Rupert at the Battle of Marston Moor. These Parliamentarian victories relieved the threat to London that the Royalists had maintained since 1643 but had been unable to fulfill with a final blow. Nonetheless, military deadlock persisted. Absent the formulation of a strategic concept to prosecute the fight, neither side was able to prevail for any length of time. Meanwhile the toll of the war in terms of lives and lost fortunes continued to mount. ¹⁸ It was apparent that greater revenues alone would not lead to victory. Parliament sought a solution by again reorganizing its military structure.

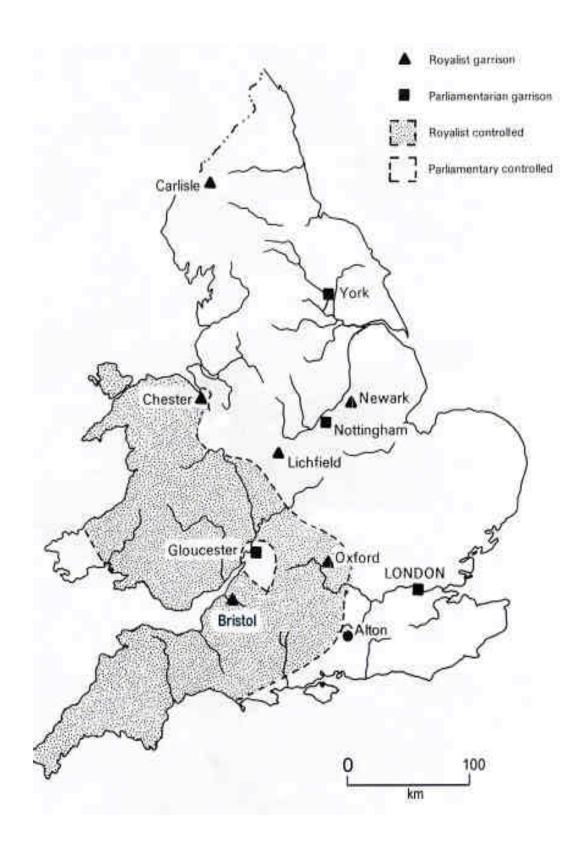


Figure 13. Situation in 1644. Map adapted from Battles in Britain 1066-1746. 19

Unlike the regionally based associations, the New Model Army was a national, centralized force, paid and directed from London. Its administrative and fiscal support systems were streamlined to a degree, and the army's leadership was chosen primarily by merit.²⁰ The New Model Army ordnance, accepted on 17 February 1644, merged four regional armies into a single force of ten cavalry regiments of six hundred men each, twelve foot regiments of twelve hundred men, and one regiment of one thousand men. Fairfax was appointed commander in chief.

Charles sought to immediately defeat the New Model, or as the Royalists derisively termed it, the "New Noodle," to defuse any thought that his new adversary could change the shape of the war. In a close fight at Naseby on 14 June 1645, the Parliamentarians scored the victory when Cromwell, after having put one wing of the Royalist cavalry to flight, reformed his hors and returned to the battlefield and conducted a further attack. The victory was significant because the New Model successfully survived its baptism of fire, but once more a set-piece battle had been fought without any clear effect on the overall course of the war. Royalist hopes were certainly dimmed at this point. They had suffered defeat after defeat since their high-water mark in 1643. Even so, no clear shift in momentum was discernable. Either the King or Parliament could yet win the war. In the aftermath of Naseby, the Royalists took no substantial action other than to reposition their forces. The Parliamentarian Committee of Both Kingdoms on the other hand, finally issued orders that reflected the one strategic reality that had emerged most clearly since 1642: decisive battle was elusive. The parliamentarian contains the parliamentarian clearly since 1642: decisive battle was elusive.

Parliament hence decided that the New Model must operationally maneuver against all Royalist forces in the field, whether the enemy be dispersed or concentrated,

for the purpose of consolidating territory through invasion and siege. The intent was to take on the Royalist opposition wherever it could be found, and to destroy it. Such a program underscored a conviction that an advancing army should fight the enemy if encountered, but should not seek battle at the risk of losing key terrain. The campaigns waged by the New Model Army in the west of England in 1645 would therefore be very different from the operations of earlier years. No longer were the Parliamentarians looking for the decisive battle. There had been too many "big" battles during the first three years of the war. The aim now was to seize the West for Parliament. Territory meant wealth, legitimacy, and public support. The defeat of the enemy would occur within the operational framework of territorial control.

Fairfax immediately moved to relieve the Royalist siege on the town of Taunton, centrally located in Somerset. Investing the town was a Royalist host under the command of led by Lord George Goring. Fairfax's march with about eighteen thousand troops was rapid. He covered the 165 kilometers from Leicester to the Somerset border in just fifteen days. Enroute, Major General Edward Massey augmented Fairfax's troops with his brigade of 2,200 horse and dragoons. Goring's army numbered approximately ten thousand men, equally divided between horse and foot. Goring abandoned his siege of on 4 July and fell back to a position at Langport, where the rivers Yeo and Parrett protected him against attack. Goring expected reinforcement from Wales, and wanted to delay any major confrontation until his strength was greater.²³

On 5 July, as he was advancing through the town of Crewkerne, Fairfax contacted his opponent. He dispatched horsemen to capture the passes at Petherton, Ilchester, Load-Bridge, and Yeovil. As the Parliamentarian noose tightened, Goring grew desperate. On

8 July he attempted to distract Fairfax by feinting towards Taunton. Perhaps he hoped that the garrison, having just endured a long siege, might be unready for a resumption of hostilities. Instead, the horsemen that he sent under Lieutenant General Charles Porter were themselves surprised. As soon as Fairfax learned of the enemy's approach towards Taunton he hurried Massey's brigade, reinforced with regiments of New Model horse and dragoons. On the ninth the New Model units surprised Porter's men who were relaxing by a stream. Executing a hasty attack, Massey captured five hundred prisoners, and chased the remainder back towards Langport. This sharp contest convinced Goring to retreat northwest to Bridgwater so he sent all but two of his heavy guns there in advance of his main force. The next day, while Goring prepared his retreat, he deployed the Royalist army in a strong covering position

The Royalists held defensible terrain. Goring's men occupied rising ground at the bottom of which was a small stream that would have to be crossed if an enemy wished to attack. Though the day was hot and dry, recent rains had swollen the stream so that when the soldiers crossed it they would be waist high in water. The only direct route into the Royalist position was from the ford was along a narrow, hedged lane that ascended the hill. Along this hedgerow Goring stationed a strong force of musketeers whose fires could cover both the lane as well as the adjacent fields. At this point Goring yet had no desire for combat. He considered his position so imposing that he would be able to maintain it until his baggage train had reached Bridgwater.²⁴

Fairfax confronted a predicament. Massey's successful foray against Porter's horse the day prior had resulted in a sixteen kilometer separation between the two Parliamentarian wings. At his position facing Goring, Fairfax could count no more than

two thousand cavalrymen. But in any case, the narrow lane entering the Royalist position prevented any more than a handful of horsemen from attacking at once. Why Fairfax chose to fight this battle is not known with certainty. Perhaps Fairfax felt confident despite the difficult tactical situation because his local spies had already informed him that the Royalists were preparing to withdraw. Or it could have been that flush with success from Naseby and wishing to keep pressing an offensive mindset, Fairfax felt that attacking Goring here was his best chance to further inspire his New Model troops. Whatever his exact reason, the outcome to the fight that now unfolded was remarkably unpredictable.

Fairfax drew up his army in battle formation on the other side of the valley from Goring's men, and launched an artillery bombardment. The fires from the Parliamentary guns soon silenced the Royalists' two cannon and prompted Goring to recall his cavalry. The Royalist musketeers who lined the hedges now lacked any kind of support. After fifty or sixty cannonades, Fairfax sent Colonel Rainsborough and fifteen hundred musketeers splashing across the stream and towards the lane. These infantry fought from hedge to hedge until they secured the lane. Major Christopher Bethell dashed forward in the lead of the forlorn hope of two troops who raced up the lane and directly into the front ranks of Goring's cavalry brigade, who outnumbered the Parliamentarians perhaps six or eight to one. For several desperate minutes a melee ensued. Moments later another detachment of Parliamentarian horse arrived just as Colonel Rainsborough's musketeers broke through the final hedges and rushed among the confused Royalists. Goring's formations rapidly crumbled and retreated in all directions. Fairfax's horse, seven regiments in all, exploited their initial victory and pursued the fleeing Royalists to within

three kilometers of Bridgwater, taking about fourteen hundred prisoners, two thousand horse, four thousand arms, two cannon, and three wagonloads of ammunition. Dead on each side numbered about three hundred royalists and thirty parliamentarians. The Battle of Langport was a major victory, but instead of pausing to assess the strategic situation in light of the contest, this time the Parliamentarians continued their offensive without hesitation.

Fairfax now had the remainder of the largest Royalist army in the west penned inside of Bridgwater, but the town boasted substantial defenses. Connected by river to the Bristol Channel, it could be supplied by sea. The fifteen-foot-thick walls of the town were plentifully studded with cannon and barbed with forts. Surrounding them was a tidal ditch ten yards wide and up to ten feet deep. Behind the walls was a high castle occupied by eighteen hundred well-armed Royalist soldiers under the command of Sir Hugh Wyndham.²⁵ Fairfax ordered a council of war to assess the situation. Its conclusion was to prepare to storm the fortress.

Faggots were cut and eight movable bridges were constructed. A brigade of six regiments (of which four were from the New Model) was stationed on the west side of the town under Massey's command. At two in the morning on 23 July the assault began. The Parliamentarian foot hurried across their bridges that they had thrown across the moat, clambered over the walls, threw back the defending infantry, seized the Royalist cannon, and let down the drawbridge to allow their friends passage. As soon as the Parliamentarian cavalry entered, many of the Royalists surrendered, but others retreated across the river into the western half of the town and raised a second drawbridge behind them. They then fired slugs of hot iron into the buildings now occupied by the

Parliamentarians. By daybreak most of the eastern half of the town was a smoldering ruin. Wyndham refused to yield, so Fairfax's men opened fire with cannon which soon caused a tremendous conflagration throughout the remainder of the town. With the city effectively destroyed, Wyndham yielded. The Parliamentarians seized forty-four pieces of ordnance, a generous supply of ammunition, and captured one thousand prisoners. Two thousand other prisoners surrendered their arms and received parole. The operational and strategic significance of Bridgwater was tremendous. In the space of only three weeks, Fairfax had defeated several Royalist forces, captured prodigious quantities of stores, and now controlled three garrisons--Taunton, Langport, and Bridgwater--that a month earlier had belonged to the Royalists. The map below shows the fights undertaken. Parliament's new strategic approach to the conduct of campaigns was paying rich dividends.²⁷

Fairfax turned eastward and continued to reduce the royalist garrisons in the area. Bath fell at the end of the month when Parliamentarian dragoons crept forward on hands and knees across the bridge to the town gate, seized the ends of the guards' muskets, and shouted at the defenders to accept quarter. Surprised and panicked, the Royalist sentries dropped their guns and fled to safety. The dragoons blew down the gate and captured the town.²⁸

Sherborne was the next target. Besieging the town, miners were sent to prepare the approaches to the defending garrison. On14 August Fairfax unleashed his artillery and by the evening the cannon had breached a large section in the middle of the twelve-foot thick wall. But ordnance was precious, and Fairfax needed to maintain his barrage. So he offered six pence for every piece of shot recovered from the enemy's walls. Many

Parliamentarian soldiers accepted the offer. Over the next twelve hours they brought back about two hundred cannon, demi-cannon, and culverin shot. On the next day the Royalist defenders had witnessed enough and yielded. Another Royalist garrison had been eliminated. Now, one major fortress remained, the port and garrison of Bristol.

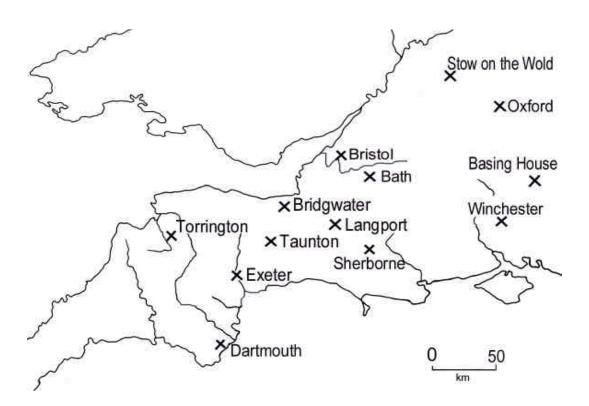


Figure 14. Battles in the West of England. Map by Author.

Bristol was the King's chief port and principal magazine in southern England, probably of more importance than the crown's inland headquarters at Oxford. The formidable Rupert was there in command of its defense, but he had few resources at his disposal to array along the town's extensive seven-kilometer system of walls and

fortifications.²⁹ Though well supplied with ordnance, ammunition, and victuals, his men were demoralized. He was losing nearly a hundred men each week to the plague, and only about 3,500 defenders remained. The city itself lay mostly in a hollow, so on its northwest side it was protected with outworks built across the top of a hill several hundred yards distant from the city wall. These fortifications bristled with heavy cannon and were studded with six of seven smaller forts and redoubts. The Avon River bordered the south perimeter of the city and here the much shorter perimeter (less than half a mile), was protected with high, thick walls. The nearly two kilometer eastern line was most vulnerable to attack, being protected by a wall only eight kilometers high. On 25 August Goring had started from Devon to move toward Bristol in the hopes of fending off a Parliamentarian siege, and raise the siege, but Massey's brigade stationed at Taunton blocked his progress. Again, the chess game of position being played by Fairfax and the New Model was working. Another Royalist citadel and its attendant garrison had been isolated.³⁰

For the assault, the Parliamentarians could muster between four and five thousand New Model troops and another five thousand local soldiers from the surrounding counties. To prevent any escape by sea, and in a rare instance of army-navy cooperation, the vice-admiral of the navy, Captain Moulton, sent ships to blockade the Bristol Channel. The morale of the parliamentarians was high and to inspire them to greater deeds of heroism, on 3 September Fairfax ordered the immediate payment of six shillings per man to reward them for their performance. The following day he opened fire with his artillery. After five days of bombardment, at one o'clock a.m. on 10 September, Fairfax ordered the ground assault to begin.

The Royalists were harried and tired. The constant pounding of the guns and the early hour of the morning dulled their response to the initial Parliamentarian onslaught. Protected by darkness and with the advantage of surprise, a key gate on the eastern approach quickly fell, through which poured a large body of Parliamentarian horse. Twenty-two cannon were captured as the Rupert's cavalry, still stunned and unable to form, retreated to the main fort on the other side of the city. Meanwhile, the Parliamentarian brigade operating against the strongly fortified south side had stalled, unable to climb the fortifications. Their thirty-rung ladders were not long enough and those individuals who tried to scale the walls or climb through portholes were cut down. Soon the losses here mounted to more than a hundred attackers. For hours, the contest hung in the balance. Finally a party of Parliamentarian foot gained access to the interior of Rupert's lines on the eastern side. These men began to storm the Royalist from their immediate rear. Foot and horse intermixed in the savage whirl of close combat. Gradually the full weight of the Parliamentarian attack pushed the defenders farther and farther from their initial defenses. When it was clear that the exterior line was irretrievably lost, the Royalists began setting fire to the city. A short time later Rupert, seeing the futility of further resistance, surrendered. All appreciated the strategic significance of Bristol. Charles had lost the nation's second-leading port and the main center for the manufacture and import of ordnance.³¹

After Bristol, Fairfax moved to reduce as many remaining Royalist strongholds as he could before the onset of winter. Over the succeeding weeks, garrison after garrison capitulated. Berkeley Castle on the road from Bristol to Gloucester fell, as did Lacock House, and Devizes on the road to London. When Winchester surrendered, it was no less

than the nineteenth Royalist outpost to fall since June. Cromwell himself eliminated the twentieth, Basing House, where he arrived on 8 October with three regiments of foot and a train of artillery. To five days his guns pounded the enemy's walls, knocking two holes in the defenses in the progress. Even though their fate was now sealed, the Royalist garrison refused Cromwell's demands to surrender. Offended at this breach of etiquette and impatient to gain the works, Cromwell ordered the assault and afterward, granted his men the privilege of free pillage for twenty-four hours. The progress is a surrender of the same than the privilege of free pillage for twenty-four hours.

Fairfax now prepared to strike at Exeter proper and destroy the last vestiges of Royalist resistance in the west. Despite their long stream of victories, the constant toll of campaigning had sapped a measure of the New Model's strength. When the army approached Dartmouth on 12 January 1646, morale had sunk owing to privation. The deep mud had hindered progress baggage and artillery trains. Fairfax prepared again for an assault "for we find more loss of men by lingering sieges than sudden storms." Again the navy assisted by sealing the town's harbor from the sea. The now familiar routines of building scaling ladders and drawing of lots to determine which men should lead the assault commenced. The preliminary attack against the outworks went exceedingly well. Only two men were killed before the Royalists surrendered in exchange for quarter. No doubt the recent memory of Basing House figured prominently in their decision.

But before Fairfax could launch the decisive attack against the main defenses, he was forced to confront a sudden threat from the north. In a final desperate gamble, the remaining Royalist forces in the field attempted to unite in the West. Fifteen hundred descended from their headquarters at Oxford to occupy Dunster Castle in Somerset.

Simultaneously a second force of horse and foot, numbering about five thousand men, had marched out of Cornwall and were moving in the direction of Exeter. By 8 February they lay to the north between Barnstaple and Torrington. Goring having departed for France, the gathering Royalist host was now under the command of Sir Ralph Hopton. Hopton's aim was to join the Oxford contingent with his own force, and then march to relieve the isolated garrison in Exeter. When the three bodies of Royalist troops were combined into a single army, it could threaten the New Model and retrieve the crown's fortunes.

Fairfax recognized the potential gravity of the situation and so established a covering force to keep the Exeter garrison contained and personally led the main body of his army, five regiments of horse, seven of foot and half the regiment of dragoons, northward towards Torrington. On 16 February the two forces confronted each other south of the town. The next day, the two armies skirmished along the muddy lanes leading into town. By evening the running fight had reached the town's edge. As Royalist musketeers lined the final hedgerows in strength and barricaded the roadways, the firing turned sporadic and then ceased as the troops settled down for the evening. Fairfax and Cromwell set out to survey the enemy's position when:

hearing a noyse in the Towne, as if the Enemy were retreating, and being loath they should goe away without an affront, to that purpose, and that we might get certaine knowledge whether they were going off or not, a small Party of Dragoons were sent to fire on the Enemy neer the Barricades and Hedges; the Enemy answered us with a round Volley of shot, thereupon the Forlorn Hope of Foot went and engaged themselves to bring off the Dragoons, and the reserve fell on to bring off the Forlorn-Hope: And being thus far engaged, the General being on the Field, and seeing the generall resolution of the Souldiery, held fit, that the whole Regiments in order, after them should fall on.³⁵

This precipitous assault began about 8 p.m. Before the barricades could be scaled royalists had to be routed by pike and musket stroke from thirteen different hedges. After two hours of hand-to-hand fighting Fairfax's foot overcame the barricades and cleared the way for the Parliamentarian horse to attack. A body of Hopton's horse abandoned its mission to support the hard-pressed infantry, and hastily withdrew through town and beyond. Isolated and battered, the Royalist foot thereafter gave way and dissolved into the night. By eleven o'clock p.m., a large number of prisoners had been rounded up and lodged in the church where Hopton had kept his magazine. Unfortunately, a royalist soldier who perhaps did not realize that his allies were being held there, ignited the remaining eighty barrels of gunpowder yet in storage. The ensuing conflagration killed about two hundred prisoners and sent hot metal and debris cascading upon the town. This tragedy notwithstanding, the battle marked another stunning triumph for the New Model.

With the loss at Torrington the Royalists had expended their final reserve of fighting infantry. Only one major fortress remained in royalist hands: the king's headquarters at Oxford. And only one royalist force of any size still maneuvered in the field: five thousand horse and one thousand foot in Cornwall. Within several months, these forces too had been routed and the war wound to a rapid conclusion. Hopton surrendered the remainder of his forces on 12 March. Nine days later the last Royalist field army capitulated at Stow-on-the-Wold. On 5 May Charles gave himself up to the Scots and the Parliamentarian victory was secure.³⁷

The significance of the New Model Army's campaigns in the west during 1645 and 1646 was that Parliament had created a new strategic paradigm for the war. It had

created an efficient military organization and then directed it to operate in a manner that attained well-defined objectives to strike directly at the Royalists' center of gravity.

The Parliamentarian strategic concepts of the last year of the war stand in stark contrast to the decisive battle mentality, which had prevailed at the war's outset. For three years both Royalist and Parliamentarian leaders had clung to the idea that by securing a major victory the war could be ended in a day. Hence a number of battles unfolded along the lines of the first battle at Edgehill; battles without strategic effect.

The Royalists had made movements to coordinate the operations of their armies in 1643, but otherwise never developed any other solution to the conduct of the war beyond the goal of seeking battle on advantageous terms. When Parliament created the New Model and then sent it to the south and west of England, it had discovered a means to project power effectively. The Parliamentarians sought out and attacked individual Royalist forces as they territorially cut off the Royalist garrisons and deprived them of support and sympathy from the countryside. The reforms of the New Model, coupled with solid leadership, allowed the Parliamentarians to defeat Royalist armies in detail whenever they sallied forth.

The English Civil War of 1642 to 1647 appears some 350 years later as a confused, tumultuous affair. No doubt it was equally so to its participants. While the political conditions, weaponry, and tactics of that bygone era have changed dramatically, at least one example remains clearly evident. To prevail, those who lead armies must be willing to adapt military theory and training to the circumstances of war as it unfolds.

¹In common parlance, Parliamentarians were known as "Roundheads," and Royalists as "Cavaliers."

²As modern historians have studied the English Civil War in far greater detail than the Bishops' Wars that preceded it, I have referred heavily to secondary sources for this chapter.

In the last decade historians have entered a debate as to the most descriptive title for the "English Civil War." Several alternatives, each reflecting an interpretation as to its origins and effects, include: "War of Three Kingdoms," "British Civil War," "The Great Rebellion," "First Civil War, (and Second)," and "War of Four Nations."

³The historiography of the military aspects of the war is significant. Several of the works that bear noting include the following (full annotations may be found in the bibliography): Regarding the financial underpinnings of the armed forces of England, James S. Wheeler's *The Making of a World Power* (1999), incorporates the latest findings. Although now growing a bit long in the tooth, the best tactical surveys of the war remain those by Peter Young: The Great Civil War (with Alfred H. Burne, (1959)), Edgehill 1642 (1967), Marston Moor 1644 (1970), and The English Civil War (1974). Stuart Reid has followed in the same tradition with fresh interpretations of tactical events in All The King's Armies (1998). Stephen Porter examines the physical destruction wrought by the fighting in *Destruction in The English Civil Wars* (1994), while Charles Carlton provides a richly documents the human costs in *Going to The Wars* (1992). Maurice Ashley's *The English Civil War* (1974) is a fine introductory volume with many illustrations. John Kenyon's Civil Wars of England (1986) very clearly untangles many of the issues surrounding the war. He and Jane Ohlmeyer edited a recent essay collection, The Civil Wars (1998), which seeks to contextualize military events in the British Isles and relate them to one another, as does Martyn Bennet in The Civil Wars in Britain & Ireland, 1638-1651 (1997), although with emphasis on political and social factors. The volume of essays, The English Civil War (1997), edited by Richard Cust and Ann Hughes exclusively discusses the political, religious and social issues of the war. Christopher Duffy's well-known Siege Warfare (1979) covers events in Britain but elsewhere as well. Peter Newman's Atlas of The English Civil Wars (1985) performs the valuable service of offering many simple maps to illustrate military events. For the New Model Army, see Mark Kishlansky's *The Rise of the New Model Army* (1979), Ian Gentiles' *The New* Model Army in England, Ireland, and Scotland (1992), and the timeless C.H. Firth's Cromwell's Army (1902 with revisions).

Also of interest are the following works that expand beyond the immediate years of the Civil War Period. Derek Hirst's *Authority and Conflict: England, 1603-1658* is a highly readable survey of the first half of the century. Michael Lynch's *Scotland: A New History* (1991) covers the totality of Scottish history in a single, lucid volume. The best synthesis of seventeenth century history is without a doubt David L. Smith's *A History of the Modern British Isles, 1603-1707: The Double Crown*.

⁴Map by the author.

⁵Peter Young, *Edgehill 1642* (Gloucestershire: Windrush Press, 1995), 71-74.

⁶Ibid., 76.

⁸Cited in Stuart Reid, *All The King's Armies: A Military History of the English Civil War 1642-1651* (Staplehurst, Kent: Spellmount Press, 1998), 19.

⁹Ibid., 21.

¹⁰Ibid., 24.

¹¹Fairfax letter to Speaker Lenthall, cited in Young, *Edgehill*, 265.

¹²Reid, 25.

¹³Map below from William Seymour, *Battles in Britain*, *1066-1746* (Hertfordshire: Wordsworth, 1997), 33.

¹⁴Barry Coward, *The Stuart Age: England, 1603-1714* (London: Longman, 1994), 208. No firm evidence exists that Charles, or any other Royalist commander, considered the movements of their forces in 1643 to be in explicit accordance with a stated strategy. The evidence suggests such a Royalist concept, but unfortunately no surviving record states the matter in such plain terms.

¹⁵Parliamentary reforms were not cure-alls, and each change involved costs as well. For instance, impressments led to higher rates of desertion among the soldiery. Many citizens of all stations resented the increased financial burdens. Political infighting plagued the new associations. And communication between London and the field commanders was always inadequate.

The Royalists encountered similar challenges and devised similar solutions in the areas under their control.

¹⁶ Relations between Scotland an England remained complex. In 1647-48 the Scots changed sides and fought for the King (who was executed on 30 January, 1649). Cromwell decisively defeated the Scots at Dunbar in 1650 and at Worcester in 1651 to bring the civil wars effectively to an end. Scotland was then subject to English rule, or at least government from London; Cromwell proved to be more tolerant of the Scottish Kirk than most Scots probably expected. He even granted Scots seats in Parliament although these were withdrawn in 1659 a year after his death. In 1660, monarchy was restored to England and Scotland. King Charles II repealed all legislation relating to Scotland going back to 1633. Formal union of the two kingdoms, and the establishment of Great Britain, occurred in 1707.

¹⁷Map above modified by the author from Peter Newman, *Atlas Of The English Civil War* (London: Croom Helm, 1985), 64.

⁷Illustration below by the author.

¹⁸Resistance to both armies was beginning to be expressed by neutralist "Clubmen" who used acts of violence and protest to resist military impositions, especially in the south of England.

¹⁹William Seymour, *Battles in Britain: 1066-1746* (Hertfordshire: Wordsworth Editions, 1997), 33.

²⁰An interesting aspect of the establishment of the New Model Army was the accompanying Self Denying Ordnance whereby all members of Parliament would resign their military commands. The intent was to separate political influence from military leadership.

²¹Hence avoiding Rupert's error at Edgehill.

²²Derek Hirst, *Authority and Conflict: England, 1603-1658* (Cambridge: Harvard University Press, 1986), 238.

²³Peter Young and Alfred H. Burne, *The Great Civil War* (Gloucestershire: Windrush Press, 1998), 212, 213.

²⁴Ibid.

²⁵Goring took his men further to the west.

²⁶It should be noted that Parliament fielded forces in addition to the New Model Army. In addition to the NMA, Parliament had two other armies in the field, those of the Western Association under MG Massey and of the seven associated northern counties under Colonel-General Sydenham Poyntz—a professional soldier who had recently returned to England after serving in Holland and Germany. There was also a Scots army in Nottinghamshire. See Young and Burne, *The Great Civil War*, 209.

 $^{27}\mathrm{Similar}$ progress was being made by other Parliamentarian forces in Wales and northern England.

²⁸Map below by the author.

²⁹Christopher Duffy, *Siege Warfare: The Fortress In The Early Modern World*, 1494-1660 (Barnes and Noble Books Reprint, 1996), 153.

³⁰Reid, 212.

³¹Ian Gentiles, *The New Model Army In England, Ireland, and Scotland, 1645-1653* (Oxford: Blackwell Publishers, 1992), 72-75.

³²Ibid., 77.

³³Contemporary illustration. Source unrecorded.

³⁴Gentiles, 80.

³⁵Cited in Reid, 216.

³⁶Parliamentary losses in the battle numbered about twenty killed and one hundred wounded. Royalist losses were most likely somewhat higher, in addition to those killed or injured as a result of the magazine explosion.

³⁷War would resume in Britain a little more than a year later.

CHAPTER 7

CONCLUSION

Military conflict is of exceptional interest to historians because war lies at the nexus of the core functioning of "state" and "society." This interdependence implicates a variety of substantive issues, among them military-civilian relations in the towns and the countryside, structures of military leadership, strategy and operations, politics, developments in military technology, and the financing of war. In the case of Britain during the first half of the seventeenth century, military leaders were both responding to the tactical necessities of the ongoing revolution in military affairs as well as implementing novel changes demanded by the exigencies of war.

The evidence of military publications within Britain, as well as the experience of British soldiers overseas, indicates that English and Scottish soldiers grappled with the important tenets of the continental military revolution. Britain's geographic detachment meant that military professionals were forced to seek overseas service if they wished to gain field experience. Tens of thousands of Britons spent a great part of the 1630s fighting wars abroad.

For instance, after the Treaty of London in 1604, James allowed a significant portion of the forces committed by Elizabeth to be transferred to the services of the States-General, and in 1616 other garrisons supplemented these. By 1621 there were two Scottish and four English regiments in the service of the States (a force of thirteen thousand men, a third of the Dutch standing army).

A fair number of these men were aristocrats of high birth who began their careers as gentlemen volunteers and, who, because of boredom or the desire for political

advantage, wanted a spell of active service in foreign campaigning. They were capable, influential, and highly literate. They returned home with a sophisticated comprehension of the new dynamics of war.

What the soldiers from England and Scotland witnessed first-hand were the changes wrought by two men, Prince Maurice of Orange and Gustavus Adolphus. These two innovators adopted an organization for their armies in which smaller units (battalions) were arranged in a linear-type formations to enhance maneuverability and to maximize firepower. The realization of the Maurician reforms in battle was difficult process for any army. Nevertheless in both Scotland and England, the establishment of untrained militia forces gradually gave way to the first professionalized armies that boasted relatively well-equipped artillery, infantry, dragoon, and cavalry arms, capable of performing the complex manual drills and maneuver that only a high state of training and comprehension of the emerging science of war could entail.

The campaigns that military leaders prosecuted between 1640 and 1646 capitalized upon their understanding of recent military advances. The strategies employed by English and Scottish military commanders were undoubtedly complex and reflective of the confused political conditions of the period. Nonetheless, the state of military affairs in Britain did not equate to the European backwater that many historians have described.

The conduct of the Bishops' Wars and English Civil War reflected the increasing complexity of warfare and specialization in the use of tactics and arms. The 'iron century' came home to Britain in 1640 when the peace was shattered by armies moving

across the land fighting with all of the tools and skills of a contemporary, thoroughly European understanding of warfare.

¹Peter Limm, *The Dutch Revolt, 1559-1648* (London: Longman, 1989), 67. However, James also allowed Spain to recruit among English Catholics and during the 1620s and 1630s there were on average 4,000 troops in the Army of Flanders.

APPENDIX:

PARLIAMENT AND CROWN

The origins of the Bishops' Wars and English Civil War(s) were complex. Brief summaries of several of the key issues of contention follow:

Book Of Common Prayer/National Covenant: The standard book of religious liturgical service, required to be used in all places of worship in England. Queen Elizabeth I in 1559 had approved the current version practiced in Britain (the kingdoms of Scotland and England had been regally united in 1603 under King James I). Charles attempted to impose this Anglican liturgy upon Scotland by means of the Scottish Book of Common Prayer in 1637. However, in 1638 the Scots signed the National Covenant that committed the Scottish kirk to its own liturgy and united the Covenanters against Charles. The Bishops' Wars of 1639 and 1640 ensued.

Coat and Conduct Money: This was the county taxation that was used to support the trained bands when they were required on active service outside their home locality. It covered expenses for food and services required as soldiers traveled to muster. In 1639 and 1640, there was widespread opposition to the tax, which exacerbated the general atmosphere of distrust of the King.

Commissions of Array: The Commission of Array had its origin in the reign of Edward I, and had been used as the means of raising troops throughout the fourteenth and fifteenth centuries. During the sixteenth century, the county-based Commissions of Array had been superseded by the assignment of Lieutenants and Deputy Lieutenants in the counties. This gave Parliament grounds for declaring the King's issue of Commissions in

1642 to be illegal. Nonetheless, the Royalists continued to use Commissions of Array to recruit military forces.

Lieutenancy: The office of the Lord-Lieutenant was created in the late sixteenth century to provide leaders for the administration of the county militia or trained bands. As the Lieutenants were often prominent members of the local aristocracy, they typically left the day-to-day running of the militia to a designated Deputy who in turn held a commission and actually participated in the trained bands. During the seventeenth century the influence of the Lieutenancy grew. Because of its dependence upon the royal prerogative, the Lieutenancy began to be treated with suspicion in the 1630s, yet ironically, it was Parliament who turned to the office for troops and leaders in the early stages of the war.

Ship Money: A tax assigned to coastal communities and intended to raise money to strengthen the English navy, Charles expanded the levy by ordering each county in England and Wales to provide funding to build and provision new ships. It became the most unpopular imposition of the Crown in the 1630s. Lacking any national emergency, Ship Money provoked increasing hostility among all levels of society, especially as it became clear that it was to be a permanent feature. In 1638 Charles gained a favorable answer from the courts that the tax was permissible. In the event, it was rather effective at raising money, but in the long term weakened the bond between subject and King.

Thorough: The policy of rule in Ireland associated with Thomas Wentworth, later Earl of Strafford. Many gentry suspected that 'Thorough,' an attempt to pacify Ireland and make it profitable to the Crown, was nothing more than what the King would attempt in England if given the opportunity.

Irish Rebellion: Catholics in Ireland rebelled in 1641. Frenzied rumors spread rapidly throughout Protestant England. Charles requested military forces be placed under his command to quell the disturbance but Parliament balked. The Parliamentarians were suspicious of Charles' motives and dissatisfied with the outcome of the Second Bishops' War. The relationship between Charles and Parliament deteriorated. In August, 1642 the King raised his standard at Nottingham to initiate the Civil War.

BIBLIOGRAPHY

Manuscript Sources

British Library, London

Additional MS. 5754, papers related to Scotland and the Borders, ca. seventeenth century. (5754/42-50, rosters and disbursements to Scottish troops).

Harleian MS. 4931, miscellaneous political and religious papers, ca. 1630s, 1640. Sloane MS. 650/36, paper of intelligence from the English camp, 5 June 1639.

Edinburgh University, Edinburgh

Da.1.14 Catalogus Librorum Bibliothecae Edinburgenae, 16 Dec 1636.

Da.1.15 Catalogus Libroruim Bibliothecae Edinburgenae, June 1641.

Da.1.29 Edinburgh University Library Accessions-Donations, 1619-1644.

Da.1.27 Catalogus Librorum in Repositories in Bibliotheca edinenais, seventeenth century.

Da.1.32 Graduation Receipts and Disbursements, 1627-1696.

Lang I Collection, Papers of Military Interest, sixteenth century-eighteenth century.

Folger Library, Washington, D. C.

V.b. 297, Sir Edward Dering, A Catalogue of His Books, ca. 1640-42.

National Army Museum, Chelsea

6308/151, a list of Scottish soldiers under the command of the Prince of Orange, 1642. 7808-77, extract of the States army showing Scottish regiments, 1635.

National Library of Scotland, Edinburgh

Advocates Manuscripts:

ADV MS. 33.4.4, Memorials of the Trubles in Scotland, 1624 to 1645, by John Spaulding

ADV MS 33.1.11, Letters and Papers, 1560-1618, addressed to Sir William Stewart regarding Scotland and Denmark

ADV MS 33.1.12 Letters and Papers, 1562-1626, to James VI by rulers of Scandinavia, Germany, and the Netherlands regarding Scots in foreign service

ADV MS 33.1.15, Vol. 32, Misc. Papers, 1521-1621, Regarding Scots Guards in France

ADV MS 33.1.1, Vol 13, Papers 1639-1641, Regarding political events and the Army at Newcastle

ADV MS 33.4.6, Papers regarding the Scots army and negotiations at Newcastle and London, 1640-1641

ADV MS 7.1.18, 'History of Scots Affairs from 1637 to 1641,' by James Gordon, minister of Rothiemay

Public Record Office, Kew (London)

- E351/295, account of Sir Patrick Ruthven, Governor of Edinburgh Castle, 1640.
- E351/296, account of paymaster for Scottish officers, 1640.
- E351/2711, account of foreign arms purchases, 1638. Also in AO1/1906/243-246.
- MPF, map collection
- SP14, State Papers Domestic, James I (SP14/39, account of the lieutenant of ordnance and SP14/178-179, musters of troops for Mansfeld's expedition, 1624).
- SP16, State Papers Domestic, Charles I .(SP16/292, proceedings of saltpeter and gunpowder commissioners; SP16/396, Council of War entry books; SP16/405, muster roll, December 1638; SP16/419; musters and instructions, April 1639; SP16, musters from April to July 1640).
- SP41/1, papers concerning the English army, 1640.
- SP41/2, muster rolls of the Scottish Army in England, 1640.

National Archives of Scotland (formerly Scottish Record Office), Edinburgh

- GD6/1075, Biel muniments, raising money for armies, ca. 1640.
- GD6/1076, Biel muniments, money paid for billeted soldiers, 1641.
- GD10/505, Broughton of Cally muniments, letter regarding a soldier's replacement, 13 August 1640.
- GD16/34/303, Airlie muniments, letter regarding entrenchments.
- GD16/50/1-106, Airlie muniments, lists of troops, misc., 1637-1667.
- GD16/50/5, Airlie muniments, instructions regarding recruitment, 25 April 1639.
- GD16/50/6, Airlie muniments, presbytery minutes regarding taxation and recruitment, 30 April 1639.
- GD16/52/3, Airlie muniments, payments for arms, 1626.
- GD16/52/14, Airlie muniments, "The Swedish Brigade," seventeenth century.
- GD16/52/15, Airlie muniments, book of military discipline and Cannae, seventeenth century.
- GD16/52/16-17, Airlie muniments, military expenses born by Earl of Airlie, seventeenth century.
- GD16/52/18, Airlie muniments, plans of battle formations, seventeenth century.
- GD16/52/19, Airlie muniments, meeting of shire commissioners and army misc., seventeenth century.
- GD18/2387, Clerk of Penicuik muniments, letter giving military news, 1640.
- GD18/3108, Clerk of Penicuik muniments, Parliamentary levy and misc., 1639-40.
- GD18/3109, Clerk of Penicuik muniments, report of Scottish army at Newcastle, 1640.
- GD26/7/158, Leven and Melville papers, Parliamentary levy, 1639-1640.
- GD26/7/159, Leven and Melville papers, articles preliminary to Treaty of Ripon, 23 October 1640.
- GD40/10/5, Lothian papers, military costs, 1640.
- GD44/13/6/2, Gordon Catle muniments, commissions in Scots Guards, 1600, 1637.
- GD44/14/4/4-5, papers regarding the Scots Guard in France, 1625-1636.
- GD57/336/1, Mss presented by Messrs Burnett and Reid, papers regarding service in the Swedish army, 1635-1653.

- GD75/393, Dundas of Dundas muniments, Privy Council act regarding fortifications, 29 August 1627.
- GD75/590, Dundas of Dundas muniments, letter from Leslie regarding Newburn, 1640.
- GD75/592, Dundas of Dundas muniments, letter from Leslie regarding finances, etc., 1 March 1641.
- GD75/641, Dundas of Dundas muniments, receipt for arms, 18 April 1639.
- GD75/643, Dundas of Dundas muniments, letter regarding supply, 9 July 1640.
- GD75/644, Dundas of Dundas muniments, letter from Committee of Estates regarding military service, 24 July 1640.
- GD84/2/148, Reay papers, commission from Count Mansfield raise Scottish regiments, 24 January 1626.
- GD84/2/149, Reay papers, arrangements to raise and transport Scottish regiments, 4 March 1626.
- GD84/2/150-155, Reay papers, misc. correspondence regarding Scottish regiments, 1626.
- GD84/2/160, 162, 163, Reay papers, requests and promises to pay Mackay's regiment, May and June 1627.
- GD84/2/170, 173,174,175,178, 180, Reay papers, commissions and payments for Scottish regiments serving the King of Denmark, March-December 1630.
- GD84/2/181, Reay papers, Gustavus Adolphus requesting Scots and military news, 15 March 1631.
- GD84/2/184-189, Reay papers, correspondence from Gustavus Adolphus and others concerning Scottish troops on the continent, July-November 1631.
- GD112/39/39/4, Breadalbane muniments, letter regarding Scots' foreign service, 30 April 1629.
- GD112/39/53/15, Breadalbane muniments, letter with news of levying a regiment for service in France, 17 November 1634.
- GD112/39/66/29, Breadalbane muniments, letter on returns of mens and arms, 28 July 1638.
- GD112/39/67/8, Breadalbane muniments, letter regarding "weaponshowing," 23 August 1638.
- GD112/39/67/27, Breadalbane muniments, letter requesting patterns for iron bullets, 31 December 1638.
- GD112/39/68/11, Breadalbane muniments, letter regarding difficulty casting bullets, 13 February 1639.
- GD112/39/68/13, Breadalbane muniments, letter regarding raising of troops, muskets and casting of bullets, 22 February 1639.
- GD112/39/68/17, Breadalbane muniments, letter inquiring about beacons and smelting, 14 March 1639.
- GD112/39/68/21, Breadalbane muniments, letter announcing the raising of troops to protect commissioners, 16 March 1639.
- GD112/39/68/23, Breadalbane muniments, letter informing of troop movements, 19 March 1639.
- GD112/39/68/24, Breadalbane muniments, letter regarding Covenanter preparations, 19 March, 1639.
- GD112/39/68/26, Breadalbane muniments, letter directing provisions of match, powder and lead, 21 March 1639.

- GD112/39/68/27, Breadalbane muniments, letter discussing news of events, 25 March 1639.
- GD112/39/68/28, Breadalbane muniments, letter discussing news of Covenanters and casting of bullets, 28 March 1639.
- GD112/39/69/3, Breadalbane muniments, regarding fears of invasion, 3 April 1639.
- GD112/39/69/5, Breadalbane muniments, letter instructing the provisioning and organization of soldiers, 6 April 1639.
- GD112/39/69/8, Breadalbane muniments, letter announcing news of the King's army, 1639.
- GD112/39/69/12, Breadalbane muniments, letter informing news of events, 15 April 1639.
- GD112/39/69/17, Breadalbane muniments, letter requesting arrows, 25 April 1639.
- GD112/39/70/4, Breadalbane muniments, letter announcing Hamilton's arrival at Leith and determination to resist, 4 May 1639.
- GD112/39/70/9, Breadalbane muniments, letter discussing the army, 16 May 1639.
- GD112/39/70/11, Breadalbane muniments, letter discussing the English army, 22 May 1639.
- GD112/39/70/16, Breadalbane muniments, letter regarding troop movements, 28 May 1639.
- GD112/39/70/17, Breadalbane muniments, letter calling for bows and arrows, hagbuts, and muskets, 28 May 1639.
- GD112/39/70/18, Breadalbane muniments, letter requesting soldiers, 29 May 1639.
- GD112/39/70/19, Breadalbane muniments, letter noting shortage of weapons, 29 May 1639.
- GD112/39/71/4, Breadalbane muniments, letter asking that war preparations continue, 10 June 1639.
- GD112/39/71/6, Breadalbane muniments, letter discussing the King's army and news, 11 June 1639.
- GD112/39/78/10, Breadalbane muniments, letter describing shire organization for military service, 3 April 1640.
- GD112/39/78/11, Breadalbane muniments, letter discussing military events, 7 April 1640.
- GD112/39/78/12, Breadalbane muniments, letter noting recruiting matters, 9 April 1640.
- GD112/39/78/15, Breadalbane muniments, letter regarding affairs in Edinburgh, 25 April 1640.
- GD112/39/79/1, Breadalbane muniments, petition for poor to stay home, 1 May 1640.
- GD112/39/79/2, Breadalbane muniments, letter of news from Edinburgh castle, 2 May 1640.
- GD112/39/79/5, Breadalbane muniments, letter regarding colors, Edinburgh castle, and news about the King, 10 May 1640.
- GD112/39/79/12, Breadalbane muniments, letter from Leslie calling for troops, 30 May 1640.
- GD112/39/79/14, Breadalbane muniments, letter calling for military preparations, no date.
- GD112/39/80/3, Breadalbane muniments, letter describing fighting at Edinburgh castle, 12 June 1640.

- GD112/39/80/4, Breadalbane muniments, letter requesting marching of troops, 19 June 1640.
- GD112/39/81/5, Breadalbane muniments, letter stating no progress in siege of Edinburgh castle, 17 July 1640.
- GD112/39/81/7, Breadalbane muniments, letter describing the campaign towards Newcastle, 13 August 1640.
- GD112/39/81/8, Breadalbane muniments, news of the army marching in England, 19 August 1640.
- GD112/39/81/11, Breadalbane muniments, letter regarding the state of the army near Newcastle, 29 August 1640.
- GD112/39/81/12, Breadalbane muniments, letter mentioning the condition of the army and shortage of provisions, 29 August 1640.
- GD112/39/82/1, Breadalbane muniments, letter announcing a powder magazine explosion and success of the Scots Army, 15 September 1640.
- GD112/39/82/18, Breadalbane muniments, letter from Leslie describing military and political considerations, 17 October 1640.
- GD124/13/2, Mar and Kellie papers, commission to muster troops, 20 July 1640.
- GD137/2128-29, Scrymgeour Wedderburn muniments, rosters, pay lists, provisions, and weapons of Montrose garrison,1640.
- GD205/1/34, Ogilvy of Inverquharity papers, letter from Argyll on meal supplies, 1640.
- GD406/1/422, Hamilton muniments, letter describing military affairs and political considerations, 25 June 1638.
- GD406/1/996, Hamilton muniments, letter concerning military preparations, 10 January 1639.
- GD406/1/1115, Hamilton muniments, letter reporting arms and powder being sent to Scotland, 10 June 1639.
- GD406/1/1218, Hamilton muniments, letter discussing military news, 20 August 1640.
- GD406/1/1219, Hamilton muniments, letter regarding the fight at Newburn, 2 September 1640.
- GD406/1/1238, Hamilton muniments, letter regarding Covenanters military preparations, 15 April 1640.
- RH1/2/563, Register House papers, list showing Scottish officers in service of Gustavus Adolphus, September 1632.
- RH1/2/823, Register House papers, letter with news of campaigns in the Netherlands and Germany, 20 July 1632.
- RH1/2/828, Register House papers, warrant and commission to raise Scots regiments to serve the French king, 1633.
- RH1/2/824, Register House papers, letter with news of continental military events, 16 May 1633.
- RH9/2/235-236, Miscellaneous papers, regarding Scots service with the King of Sweden, October 1628
- RH9/5/35, Miscellaneous papers, commission to levy troops to serve in Poland, 24 March 1634.
- RH9/17/268, Miscellaneous papers, letter regarding resignation from French service, 10 December 1632.

RH15/29/160, mutual bond of relief for military expenses with list of signatories, 6 March 1639.

Printed Primary Sources

- Articles And Ordinances Of Warre: For The Present Expedition Of The Armie Of The Kingdome Of Scotland. Edinburgh, 1640.
- Aldis, Harry G., ed. *A List of Books Printed In Scotland Before 1700*. Edinburgh: National Library of Scotland, 1970.
- Baillie, Robert. The Letters and Journals of Robert Baillie. Edinburgh, 1841.
- Balfour, James. The Historical Works. Vol. 2. Edinburgh, 1824.
- Calendar of State Papers Domestic, James I, 1603-1625, 4 vols. London, 1857-9.
- Calendar of State Papers Domestic, Charles I, 1625-1649, 23 vols. London, 1858-97.
- De Gheyn, Jacob. *The Exercise of Arms*, (1607). Reprint ed. by David J. Blackmore, London: Greenhill Books, 1989.
- Ferguson, James. Papers Illustrating the History of The Scots Brigade In the Service of The United Netherlands, 1572-1782. Edinburgh: Scottish Historical Society, 1899.
- General Register House. *Register of The Privy Council of Scotland*. Vol. 1, 1625-1627. Second Series. Edinburgh: 1899.
- . Register of The Privy Council of Scotland. Vol. 2, 1627-1628. Second Series. Edinburgh: 1900.
- _____. Register of The Privy Council of Scotland. Vol. 3, 1629-1630. Second Series. Edinburgh: 1901.
- _____. *Register of The Privy Council of Scotland*. Vol. 4, 1630-1632. Second Series. Edinburgh: 1902.
- _____. Register of The Privy Council of Scotland. Vol. 5, 1633-1635. Second Series. Edinburgh: 1904.
- _____. Register of The Privy Council of Scotland. Vol. 6, 1635-1637. Second Series. Edinburgh: 1905.

- _____. Register of The Privy Council of Scotland. Vol. 7, 1638-1643. Second Series. Edinburgh: 1906.
- Gordon, Patrick of Ruthven. *Britane's Distemper From the Yeare of God 1639 to 1649*. Aberdeen: Spalding Club, 1844.
- Gordon, William. *History of the Family of Gordon*. Edinburgh, 1726-27.
- Mactavish, Duncan, ed. *Minutes of The Synod of Argyll, 1639-1651*. Scottish Historical Society. Vol. 37. Edinburgh, 1943.
- McNeill, Peter G., and Hector L. MacQueen, eds. *Atlas of Scottish History to 1707*. Edinburgh: The Scottish Medievalists and Department of Geography, University of Edinburgh, 1996.
- Millar, A. H., ed. *The Compt. Buik of David Wedderburne, Merchant of Dundee 1587-1630; Together with The Shipping Lists of Dundee 1580-1618.* Vol. 28. Scottish Historical Society. Edinburgh, 1898.
- Pryde, George S., ed. *Ayr Burgh Accounts*, *1534-1624*. Vol. 28. Scottish History Society. Edinburgh, 1937.
- Rushworth, John. Historical Collections. London, 1680.
- Spalding, John. *Memorials of The Troubles in Scotland and In England*, 1624-1645. Vol. 1. Aberdeen, 1850.
- Smith, Thomas. The Arte Of Gunnerie... London, 1600. STC 22855
- Symonds, Richard. *Diary Of The Marches Of The Royal Army During The Great Civil War*. Edited by Charles F. Long. Camden Society, 1859; Reprint, AMS Press, 1968.
- Ward, Robert. Animadversions Of Warre... London, 1639. STC 25025.
- Wood, Margaret, ed. *Extracts from The Records of The Burgh of Edinburgh*, 1626 to 1641. Edinburgh: Oliver and Boyd, 1936.

Secondary Sources

- Ashley, Maurice. *The English Civil War*. London: Thames and Hudson Limited, 1974; New York: St. Martin's Press, 1990.
- Asquith, Stuart, and Chris Warner. New Model Army: 1645-1660. Oxford: Osprey, 1981.

- Ayton, Andrew and J. L. Price, eds. The *Medieval Military Revolution: State, Society, and Military Change in Medieval and Early Modern Europe*. London: I. B. Tauris Publishers, 1995.
- Barker, Thomas M. Army, Aristocracy, Monarchy: Essays On War, Society, And Government In Austria, 1618-1780. New York: Columbia University Press, 1982.
- Barter, Sara, ed. Scottish Arms Makers. London: Arms and Armour Press, 1977.
- Bartlett, Thomas, and Keith Jeffrey, eds. *A Military History Of Ireland*. Cambridge: Cambridge University Press, 1996.
- Beckett, Ian F. W. *The Amateur Military Tradition: 1558-1945*. Manchester History Of The British Army Series. Manchester: Manchester University Press, 1991.
- Bennett, Martyn. *The Civil Wars In Britain & Ireland, 1638-1651*. Oxford: Blackwell Publishers, 1997.
- Bil, Albert. *The Shieling: 1600-1840, The Case of the Central Scottish Highlands*. Edinburgh: John Donald, 1990.
- Black, Jeremy. *European Warfare*, 1660-1815. New Haven and London: Yale University Press, 1994.
- . *Warfare: Renaissance To Revolution, 1492-1792.* Cambridge Illustrated Atlas Series. Cambridge: Cambridge University Press, 1996.
- _____. War and The World: Military Power and The Fate of Continents, 1450-2000. New Haven: Yale University Press, 1998.
- Blair, Claude and Robert Woosman-Savage. Scottish Firearms and A Register of Scottish Long-Guns. Bloomfield, Ontario: Museum Restoration Service, 1995.
- Boynton, Lindsay. *The Elizabethan Militia*, 1558-1638. London: Routledge & Kegan Paul, 1967.
- Carlton, Charles. *Going To The Wars: The Experience Of The British Civil Wars, 1638-1651*. London: Routledge, 1992.
- Chandler, David and Ian Beckett, eds. *The Oxford History of the British Army*. Oxford: Oxford University Press, 1994.

- Clark, David. Battlefield Walks: North. Oxford: Grange Books, 1997.
- Coward, Barry. The Stuart Age: England, 1603-1714. London: Longman, 1994.
- Cressy, David. *Literacy and the Social Order: Reading And Writing In Tudor And Stuart England*. Cambridge: Cambridge University Press, 1980.
- Cruickshank, C. G. *Elizabeth's Army*. Oxford: Oxford University Press, 1966.
- Cust, Richard, and Ann Hughes, eds. *The English Civil War*. New York: St. Martin's Press, 1997.
- Donald, Peter. *An Uncounselled King: Charles I and the Scottish Troubles, 1637-1641.* Cambridge: Peter Donald, 1990.
- Donagan, Barbara. "Halcyon Days And The Literature of War: England's Military Education Before 1642," *Past and Present* 147 (May 1995): 65-100.
- Dow, Alexander. *Ministers to The Soldiers of Scotland: A History of The Military Chaplains of Scotland Prior to The War in The Crimea*. Edinburgh and London: Oliver and Boyd, 1962.
- Duffy, Christopher. Siege Warfare: The Fortress in the Early Modern World, 1494-1660. London: Routledge & Kegan Paul, 1979.
- Durkan, John, and Anthony Ross. *Early Scottish Libraries*. Glasgow: John S. Barns and Sons, 1961.
- Edwards, Peter. "Gunpowder and the English Civil War." *The Journal of the Arms and Armour Society* 2 (September 1995): 109-131.
- Eltis, David. *The Military Revolution In Sixteenth Century Europe*. International Library Of Historical Studies. London: Tauris Academic Studies, 1995.
- Emberton, Wilfrid. *The English Civil War Day By Day*. Great Britain: Alan Sutton Publishing Limited, 1995.
- Ferguson, William. *Scotland's Relations with England: A Survey to 1707*. Edinburgh: John Donald Publishers, 1977.
- Finlayson, Charles P. Clement Little and His Library: The Origins of Edinburgh University Library. Edinburgh: Edinburgh University Library, 1990.
- Fissel, Mark Charles. *The Bishops' Wars: Charles I's Campaigns Against Scotland,* 1638-1640. Cambridge Studies in Early Modern British History. Cambridge: Cambridge University Press, 1994.

- ______, ed. *War and Government in Britain*, 1598-1650. Manchester: Manchester University Press, 1991.
- Firth, Charles H. Cromwell's Army: A History of the English Soldier During the Civil Wars, the Commonwealth and the Protectorate. London: Methuen & Co., 1911.
- Foulkes, Charles. *The Armourer and His Craft: From the XIth To The XVIth Century*. London: Meuthen and Co. Ltd., 1912.
- Furgol, Edward M. A Regimental History Of The Covenanting Armies: 1639-1651. Edinburgh: John Donald Publishers Ltd., 1990.
- Gentles, Ian. *The New Model Army In England, Ireland, and Scotland, 1645-1653*. Oxford: Blackwell Publishers, 1992.
- Green, Howard. *Guide to the Battlefields Of Britain And Ireland*. London: Constable and Company Ltd., 1973.
- Guild. Jean R., ed. *Edinburgh University Library: A Collection of Historical Essays*. Edinburgh: Alexander Law, 1982.
- Hennessy, Maurice. *The Wild Geese: The Irish Soldier In Exile*. London: Sidgwick And Jackson, 1973.
- Hirst, Derek. *Authority and Conflict: England, 1603-1658*. Cambridge: Harvard University Press, 1986.
- Hogg, O. F. G. English Artillery, 1326-1716. London: Royal Artillery Institution, 1963.
- Jennings, Brendan, ed. Wild Geese In Spanish Flanders: 1582-1700; Documents, Relating Chiefly To Irish Regiments, from the Archives Generales Du Royame, Brussels, and Other Sources. Dublin: Stationery Office For The Irish Manuscripts Commission, 1964.
- Kenyon, John P. *The Civil Wars of England*. London, 1988.
- Kenyon, John P and Jane Ohlmeyer, eds. *The Civil Wars: A Military History of England, Scotland, and Ireland, 1638-1660.* Oxford: Oxford University Press, 1998.
- Kishlansky, Mark A. *The Rise of the New Model Army*. Cambridge: Cambridge University Press, 1979.

- Kleinschmidt, Harald. "Using the Gun: Manual Drill and The Proliferation of Portable Firearms." *The Journal of Military History* 63, no. 3 (July 1999): 601-629.
- Lawrence, Anne. *Parliamentary Army Chaplains*, *1642-1651*. Royal Historical Society. London: Boydell Press, 1990.
- Lee, Maurice. *The Road to Revolution: Scotland Under Charles I, 1625-37.* Champaign: University of Illinois, 1985.
- Limm, Peter. The Dutch Revolt, 1559-1648. London: Longman Press, 1989.
- Lindley, Keith. *The English Civil War and Revolution: A Sourcebook*. London and New York: Routledge, 1998.
- Luttwak, Edward N. *The Grand Strategy of the Roman Empire: From the First Century A.D. to the Third.* Baltimore: Johns Hopkins University Press, 1976.
- Lynch, Michael. Scotland: A New History. London: Pimlico Press, 1998.
- Macdonald, Robert H., ed. *The Library of Drummond of Hawthornden*. University Press of Edinburgh, 1971.
- Macinnes, Allan. *Charles I and the Making of the Covenanting Movement, 1625-1641*. Edinburgh: John Donald: 1991.
- Mackay, John. An Old Scots Brigade: Being the History of Mackay's Regiment, Now Incorporated with The Royal Scots. Edinburgh: William Blackwood and Sons, 1885.
- Millar, Gilbert John. *Tudor Mercenaries and Auxiliaries*, *1485-1547*. Charlottesville: University Press of Virginia, 1980.
- Miller, Amos C. *Sir Richard Grenville of the Civil War*. London: Phillimore and Co., Ltd., 1979.
- Newman, P. R. *The Old Service: Royalist Regimental Colonels And The Civil War, 1642-46.* Manchester: Manchester University Press, 1993.
- Oman, Sir Charles. A History of The Art of War in the Sixteenth Century. London, 1937.
- Parker, Geoffrey. *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800.* 2d ed. Cambridge: Cambridge University Press, 1996.
- Paterson, Raymond Campbell. My Wound Is Deep: A History of the Later Anglo-Scottish Wars, 1380-1560. Edinburgh: John Donald, 1997.

- Porter, Stephen. *Destruction In The English Civil Wars*. United Kingdom: Alan Sutton Publishing, Ltd., 1994.
- Reid, Stuart. *The Campaigns of Montrose: A Military History of the Civil War in Scotland, 1639 to 1646.* Edinburgh: The Mercat Press, 1990.
- Reid, Stuart, and Graham Turner. *Scots Armies of the English Civil Wars*. Oxford: Osprey, 1999.
- _____. All The King's Armies: A Military History Of The English Civil War, 1642-1651. Staplehurst, Kent: Spellmount Limited, 1998.
- Roberts, Keith, and Angus Mcbride. *Soldiers of the English Civil War: 1, Infantry*. Great Britain, Osprey Press, 1989. Elite Series, #25.
- Rogers, Clifford J., ed. *The Military Revolution Debate: Readings On The Military Transformation Of Early Modern Europe*. Boulder: Westview Press, 1995.
- Roots, Ivan. *The Great Rebellion, 1642-1660*. London: B.T. Batsford Limited, 1966; Reprint, London: Alan Sutton, 1998.
- Seymour, William. *Battles In Britain And Their Political Background: 1642-1746*. London: Sidgwick And Jackson, 1975.
- Simpson, Grant G., ed. *The Scottish Soldier Abroad*. Edinburgh: John Donald Publishers, 1992.
- Simpson, Peter. *The Independent Highland Companies*, 1603-1760. Edinburgh: John Donald Publishers, 1996.
- Smith, David L. *A History of the Modern British Isles*, 1603-1707: The Double Crown. Oxford: Blackwell Publishers, 1998.
- Spencer, Michael G. "The English Flintlock and the English Civil War." *The Journal of the Arms and Armour Society* 2 (September 1992): 89-111.
- Stevenson, David. *The Scottish Revolution: 1637-1644. The Triumph Of The Covenanters.* New York: St. Martin's Press, 1973.
- Stone, Lawrence. *Schooling And Society: Studies In The History Of Education*. Baltimore: Johns Hopkins University Press, 1976.
- Terry, C.S. The Life and Campaigns of Alexander Leslie, First Earl of Leven. London, 1899.
- Ward, Marjorie. *The Blessed Trade*. London: Michael Joseph, 1971.

- Wheeler, James Scott. *The Making Of A World Power: War And The Military Revolution In Seventeenth Century England*. Great Britain: Sutton Publishing, 1999.
- Whyte, Ian D. Scotland Before the Industrial Revolution: An Economic and Social History, c.1050-c.1750. London: Longman, 1995.
- Young, Peter. *The English Civil War: A Military History of the Three Civil Wars 1642-1651*. London: Eyre Meuthen, 1974.
- _____. From Hastings To Culloden: Battlefields In Britain. Kineton, England: The Roundwood Press, 1979.
- ______. Edgehill, 1642. London: Windrush Press, 1967;Reprint, London: 1995.
- Young, Peter and Alfred H. Burne. *The Great Civil War: A Military History Of The First Civil War, 1642-1646.* United Kingdom: Eyre and Spottiswoode, 1959; Reprint, London: Windrush Press, 1998.

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